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ABSTRACT

A cross-sectional study of self-image and racial and sexual differences in self-attitude in a fully integrated public school system is reported. The subjects were all students in the kindergarten, 3rd, 6th, 9th, and 12th grades. The instruments chosen for the study were the Self-Social Symbols Tasks, Gough Adjective Check List, Edwards Personal Preference Schedule, a form of the Semantic Differential, and a subjective paragraph describing present self and ideal self. The major findings are as follows: Over the range of grades measured there is no significant racial difference in self-esteem, but black self-esteem appears to be lower than that of whites at the kindergarten level and higher than that of whites at the 12th grade level. Female self-esteem tends to be higher than that of males. Blacks have less esteem for and tend to identify less with father, teacher, and friends than do whites. The teacher has relatively low esteem for and lack of identification with all subgroups. Black students show greater individuation and less social interest than whites. An abasement-succorance-aggression need pattern is observed at the 3 higher grade levels for all subgroups. Detailed findings, including means, standard deviations, black/white comparisons, and male/female comparisons on all the scales of all the instruments, are provided. The study concludes with recommendations for remedial action. (DG)

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COMPARISON OF CHANGES IN SELF-IMAGE OF BLACK AND WHITE STUDENTS KINDERGARTEN THROUGH HIGH SCHOOL

Henry G. Cornwell
Lincoln University
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November 30, 1970

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I. PREFACE AND ACKNOWLEDGEMENTS

The present investigation was undertaken in response to a request from a local school board to the Lincoln University Institute for Community Affairs for an evaluation of the city's public school system. The four areas of investigation proposed by the school board were:

I. A study of the black-white cultural gap, and the effects of education.

II. Vocational choice as a reflection of parental attitudes and counselor influence.

III. Comparison of black-white changes in self-image from kindergarten through high school.

IV. A study of adult attitudes.

The Department of Psychology at Lincoln University agreed to pursue the research of the third listed area, comparison of black-white changes in self-image, kindergarten through high school.

The results of the investigation presented in this report represent the combined efforts and cooperation of many people: the principals and teachers of the school system involved in the study, the staff of the psychology department at Lincoln, the secretarial staff at Lincoln, the members of the school board concerned, Mr. Eugene Hollick, Director of Research for the school board, and especially the 2500 students who submitted themselves to the measurements that provided the data for this report. The author wishes to express his gratitude and indebtedness to Professor Carlton D. Trotman and Professor Penelope Kinsey for their invaluable services as research assistants in the orientation of the public school teachers who administered the tests, and in the scoring of the Self-Social Symbols Tasks and the Semantic Differential. The writer also wishes to thank the members of the secretarial staff for their prodigious efforts: Miss Pamela Jenkins and Mr. Carl Cornwell who assisted in scoring the Self-Social Symbols Tasks and the Semantic Differential, Mrs. Elizabeth Pate who assisted in the statistical analyses, and in preparation of the tables and graphs, and Mrs. Jennie Brown who typed the final report.

II. SUMMARY

In response to a request from the school board of a neighboring city for assistance in evaluating the school system of that city, The Institute for Community Affairs at Lincoln University agreed to implement and supervise research on the impact of public education upon four aspects of student development and change. The Department of Psychology at Lincoln University agreed to undertake research on the third area of investigation proposed by the school board, namely the comparison of black-white changes in self-image from kindergarten

through high school. The present study was designed to determine (1) the changes that occur in the self-image as children move through the educational system, and (2) the differences between black and white students in those changes, if such differences exist. Several aspects of the self-image were measured at five selected grade levels in the city's public schools: Kindergarten, third, sixth, ninth and twelfth grades. The measurement of the self-image was achieved with (1) the Ziller-Long-Henderson Self-Social Symbols Tasks, (2) the Gough Adjective Check List, (3) the Edwards Personal Preference Schedule, (4) the Semantic Differential, and (5) a subjective paragraph written in response to four questions: "What kind of person am I right now?" "What are the things that I like about myself?" "What are the things that I dislike about myself?" "If I could be any kind of person I wanted, what would I be like?" These five instruments were administered to 2567 students enroiled in the public schools of the city. This sample represented 84% of the total enrollment at these grade levels. Twenty-six percent of the students were black and seventy-four percent were white. All of the schools attended were completely integrated. The data collected were evaluated according to 2 X 2 X 5 factorial design in which race, sex, and grade level were the independent variables. An analysis of variance was performed on each dependent variable showing a change across the five grade levels. Individual z-tests between race and sex groups were performed on all group differences in order to evaluate their statistical significance. Graphic comparisons of all group differences were made. The results of the statistical analyses suggested the following conclusions: (1) that no overall race differences in self-esteem existed in the population studies, (2) that black students at the kindergarten level had lower self-esteem than white students at that level, (3) that white students at the twelfth grade level had lower self-esteem that black students at that level, (4) that black students evaluated father, teacher, and friends lower than white students, and that they identified with these significant others to a lesser degree than white students, (5) that female students had lower self-esteem than male students at the ninth grade level, (6) that female students identified more with teachers and friends than males at all grade levels except the sixth, at which they identified less with the teacher, (7) that black students at all levels showed less social interest and more minority identification (individuation) than whites, and (8) that the dominant need-structure pattern of the students in the sixth, ninth, and twelfth grades was one of Abasement-Succorance-Aggression. From these conclusions, seven problem areas meriting the attention of the school system were identified: (1) the black-white difference in self-esteem at the kindergarten and twelfth grade levels, (2) the black-white difference in the evaluation of, and the identification with father, teacher, and friends, (3) the black-white difference in social interest, (4) the female drop in identification with the teacher at the sixth grade, (5) the female drop in self-esteem at the ninth grade, (6) the low evaluation of, and the low identification with the teacher shown by all students at all grade levels, and (7) the Abasement-Succorance-Aggression need pattern of students at the sixth, ninth, and twelfth grade levels. Recommendations of procedures to be followed in dealing with each of the problem areas were made.

III. INTRODUCTION

The self-image has an important and crucial significance for any attempt to evaluate the effectiveness of the educational process. Changes in self-concept, while due in part to maturational growth and development, will also reflect the experience of success, failure, progress and competence encountered by the child in the educational enterprise. Moreover, the existing self-concept serves as a frame of reference and starting point for the development of attitudes, aspirations, skills and patterns of social behavior. The self-concept may be considered as a kind of psychological nucleus around which the total personality configuration becomes organized and integrated. Therefore, it is assumed that realistic assessment of educational effects must include the measurement of the self-image at different educational levels.

Much has been written concerning differences between self-image developed by black and white children that may be attributed in part to differences in social and educational experiences. It is desirable, therefore, to determine the extent to which differences between blacks and whites in self-concept do in fact exist and whether such differences become more or less pronounced as the child proceeds from elementary to secondary school.

The deleterious effects of a negative self-image have been hypothesized to account for the inferior school performance of minority-group children who are the victims of racial discrimination. Since Allport (1954) delineated the personality syndromes produced in the victims of prejudice and discrimination Clark (1955) and Pettigrew (1964) have both reviewed evidence supporting the existence of personality configurations characterized by self-derogation, self-rejection and self-hatred among a significantly greater proportion of black youngsters than white. From this background there has developed a general consensus that the black child has a poorer self-image than the white child. However, recent comparative studies have produced equivocal data with respect to such conclusions: Deutsch (1960, 1967) found lower class black children had more negative self-concepts than lower class white children. Wylie (1967) on the other hand found no difference between blacks and whites expressed self-estimates at the junior high school level and slightly more favorable estimates among black children at the high school level. McDonald and Gynther (1965), comparing southern black and white high school seniors, obtained higher self-ratings by blacks, although ideal self-ratings were lower than those of whites, even in a rural southern segregated community. Baughman and Dahlstrom (1968) found more positive self-concepts among black children than among comparable white children. These most recent findings suggest the need to re-examine the old "damaged-self" hypothesis as it applies to black children, to ascertain empirically just what differences in self-image do, in fact, or do not exist between different race, class, age, and sex subgroups. When the presence or absence of such differences has been established

then the appropriate educational procedures for modifying undesirable discrepancies may be undertaken. The present study, therefore, seeks to explore several dimensions along which the self-concept may vary as they may be related to the independent variables of race, class, age-grade level and sex.

IV. METHOD

SUBJECTS

The subjects in this investigation were all of the students enrolled in the kindergarten, third, sixth, ninth, and twelfth grades of the public school system who attended school on the day that the tests were administered. The total number reported by the school board as enrolled in these grades was 3050 students, and the total number completing tests that were scoreable was 2567, representing 84% of the total enrollment. The percent tested at each grade level were: kindergarten, 78%; third grade, 81%; sixth grade, 93%; ninth grade, 94%, and twelfth grade, 73%. Of the total tested, 51% were male students and 49% female; 74% were white, and 26% were black students. The black student percentages at the respective grade levels were: kindergarten, 26%; third grade, 26%; sixth grade, 29%; ninth grade, 24%; and twelfth grade, 23%. Table 1 shows the distribution of students by sex, race, and grade.

TABLE 1

Distribution of Students Tested at Five Grade Levels on The Self-Social Symbols Tasks

	Male		Female		
Grade	White	Black	White	Black	Total
12	136	49	152	39	376
9	213	67	230	75	585
6	241	88	188	89	606
3	188	68	165	54	475
K	198	69	189	69	525
Total	976	341	924	326	2567
	1317		1250		

White: 74%

Black: 26%

MATERIALS

The instruments chosen to measure the various dimensions of the self-image were the following:

1. The Ziller-Long-Henderson Self-Social Symbols Tasks, Primary and Secondary Forms. (Ziller, Long, Henderson, 1965)
2. The Gough Adjective Check List (ACL) (Gough, 1952)
3. The Edwards Personal Preference Schedule (EPPS) (Edwards, 1953)
4. A form of the Semantic Differential (Osgood et. al. 1957; 1969)
5. A subjective paragraph describing the present self and the ideal self.

A brief description of each of these instruments follows:

(1) THE SELF-SOCIAL SYMBOLS TASKS is a symbol arrangement test in which a symbol representing the self is placed in a spatial relationship to symbols representing significant others. A description of the scales of the test follows. Facsimiles of the items appear in the appendix.

Horizonal Esteem (HE) - From a horizontal row of six circles, the subject is instructed to select a circle to represent himself and to put a mark in it. This item is scored 1 - 6 in ascending order from right to left. The item occurs six times in both forms of the test making possible a maximum total score of 36 and a minimum total score of 6.

Vertical Esteem (VE) - From a vertical column of six circles the subject is instructed to select and mark a circle to represent himself. This item is scored 1 - 6 from bottom to top. It also occurs six times and has the same maximum and minimum scores as HE.

Dependency or Social Interest (DE) - The subject is instructed to draw a circle representing himself anywhere on a page containing three circles in a triangular formation, representing parents, teachers, and friends. He is scored one point if his circle touches or falls inside the triangle formed by tangents drawn to the outer surfaces of the three circles; zero if his circle falls completely outside this triangle. This item occurs six times making possible a maximum total score of 6 and minimum score of 0.

Identification with Mother (IM) - The subject is instructed to mark a circle representing himself in a horizontal row of nine circles in which the circle at one end of the row contains the letter M representing the mother. He is scored 1 - 8 according to the distance from the circle representing the mother he marks himself, the lowest score indicating the greatest identification. This item occurs only twice, making possible a maximum total of 16 and a minimum of 2.

Identification with Father (IFa) - Same as IM

Identification with Teacher (IT) - Same as IM

Identification with Friends (IFr) - Same as IM

Power (POW) - A circle containing the letter S to represent the self, is placed at the center of 5 radii at the ends of which are circles vertically above, vertically below, diagonally above, diagonally below, and horizontally beside the self circle. The subject is instructed to mark one of these circles to represent either the father, or the teacher or friends. Selection of the vertical above is scored 1, indicating least power attributed to the self, while selection of the vertical below is scored 5, indicating most power attributed to the self. This item occurs six times, twice for each of the three significant others. The maximum total score possible is 30 and the minimum is 6.

Individuation or Minority Identification (IND) - Different numbers of plain white and vertically cross-hatched circles are randomly arranged in a square enclosure. Beside the square appears a plain white circle, a vertically cross-hatched, and a horizontally cross-hatched circles. The subject is instructed to select one of these three circles to represent himself and to draw it in the same enclosure. Selection of a circle in the minority within the enclosure, or selection of a circle not in the enclosure is scored one point. Selection of a circle in the majority within the enclosure is scored zero. This item occurs ten times, making possible a maximum total score of 10 and a minimum of 0.

Realism (Color) - If a white subject selects a plain white circle to represent himself in the previous task he is scored one point on this scale. If he selects a cross-hatched circle to represent himself he is scored zero. If a black subject selects a cross-hatched circle to represent himself he is scored one point; if he selects a plain white circle he is scored zero. Since this item occurs 10 times, the maximum realism score is 10 and the minimum 0. This item is scored for realism only at the kindergarten and third grade levels.

Complexity (COM) - The subject is instructed to draw a circle around one of three symbols of differing complexity to represent himself. He is scored 3 from the simplest to the most complex (according to judges ratings) figure. This item occurs ten times, making possible a maximum total score of 30 and a minimum of 10. This item appears only in the secondary form of the test.

Group Identification (GRI) - From an array of nine persons including the self the subject is instructed to select persons who belong together, put their initials in a square enclosure and draw a circle around them. He can make as many or as few groups as he wishes, but he must use up all nine persons. The score is the number of persons in the group containing the self including the self. This item occurs four times making the maximum score possible 36 and the minimum 4. This item appears only in the secondary form of the test.

Group Identification II (GRII) - In the first two of these items if the mother or father is included in the group with the self, one point is scored for each parent. The maximum score possible is 4 and the minimum is 0. This item occurs only in the secondary form of the test.

Centrality or Egocentricity - In a large circle the subject is instructed to draw two circles, one representing the self and one representing a friend. If he places the circle representing himself closer to the center of the circle, he is scored one point. If the circles are equidistant from the center or if the circle representing the friend is closer to the center, he is scored zero. This item occurs six times. The maximum total score possible is 6 and the minimum is zero. This item appears only in the secondary forms of the test.

(2) THE GOUGH ADJECTIVE CHECK LIST (ACL) - This test is a list of 300 adjectives from which the subject is instructed to check as many as he feels are descriptive of him. A quantitative as well as qualitative evaluation of the self-image may be derived from the total number of adjectives checked, the number of favorable adjectives checked, the number of unfavorable adjectives checked, as well as from four subscales: self-confidence, self-control, lability, and personal adjustment. Also the 15 Murray Need-Scales can be derived from this list. The ACL was administered only at the 6th, 9th, and 12th grade levels.

(3) THE EDWARDS PERSONAL PREFERENCE SHCEDULE (EPPS) is an inventory of 225 pairs of statements describing activities, feelings, or attitudes. The subject is instructed to indicate his preference for one statement of every pair. The statements express fifteen psychological needs derived from Murray's research which are paired each with the other to produce fifteen scales which can be scored to produce a profile of the person's motivational structure. The scales scored are:

Achievement (ACH)	The need to accomplish, attain goals.
Deference (DEF)	The need to conform, follow directions.
Order (ORD)	The need to plan, organize, schedule activities.
Exhibition (EXH)	The need to attract attention, show off, be seen.
Autonomy (AUT)	The need to be independent, self-directing.
Affiliation (AFF)	The need to socialize, get along with others.
Intraception (INT)	The need to understand motives of self and others.
Succorance (SUC)	The need to receive help, support.
Dominance (DOM)	The need to lead, direct others.
Abasement (ABA)	The need to submit, receive blame.
Nurturance (NUR)	The need to assist, care for, give help.
Change (CHG)	The need to travel, have new experiences.
Endurance (END)	The need to persist, complete tasks.
Heterosexuality (HET)	The need to have contact with the opposite sex.
Aggression (AGG)	The need to retaliate, fight, destroy opposition.
Consistency (CON)	A non-motivational scale indicating the degree of intrascale reliability.

The EPPS was administered only at the 6th, 9th, and 12th grade levels.

(4) A form of the SEMANTIC DIFFERENTIAL was used that rotated five concepts (me, my mother, my father, my teacher, and my friends) through ten scales. This instrument gives the connotative meaning of concepts along three principal dimensions in semantic space; evaluative, potency, and activity. Three subscales were used for each dimension. The tenth scale was a black-white scale. Also a single sheet form of the Semantic Differential for the rating of the ideal self was administered. The Semantic Differential requires the checking of one of seven spaces arranged between two descriptive terms that are polar opposites on each scale. The check mark indicates how the concept is perceived by the subject with respect to that scale. Numbers from 1 to 7 consecutively are assigned to the spaces in a predetermined direction. On the evaluative subscales, dirty-clean, worthless-valuable, and bad-good, the number 1 represented the extreme bad position and the number 7 the extreme good position. Similarly on the potency scale, 1 was given the extreme weak position and 7 the extreme strong position. On the activity scale 1 was given the extreme passive position and 7 the extreme active position. The total of the three subscales on each dimension was taken as the measure of that dimension.

The Semantic Differential was administered at only the 6th, 9th, and 12th grade levels.

(5) THE SUBJECTIVE PARAGRAPHS consisted of the answers to four questions:

a. What kind of person am I right now?
b. What do I like about the kind of person I am now?
c. What do I dislike about the kind of person I am now?
d. If I could be any kind of person I wanted, what would I be like?

The subjective paragraph was administered at only the 6th, 9th, and 12th grade levels.

PROCEDURE

Orientation of Teachers - The Director of Research for the school board scheduled an orientation session for all teachers who would be administering the tests at the five grade levels. Each of the three members of the Lincoln psychology staff conducted a separate orientation session, one with the kindergarten and third-grade teachers, another with the sixth-grade teachers, and the third with the ninth and twelfth-grade teachers. The teachers were provided with all of the test materials and written instructions for their administration, after which the psychologist conducting the session demonstrated the administration of each instrument.

Administration of Tests - Upon the basis of the enrollment figures furnished by the school board sufficient quantities of each test were distributed to the teachers at the respective grade levels. All of

the testing was initiated and completed during the week of April 20, 1970. All of the tests were administered in at least two separate testing sessions. More sessions were required at some levels. Since no time limit was involved in any of the tests, the length of the testing sessions varied according to the characteristics of each group. The primary form of the Self-Social Symbols Tasks was administered to the kindergarten and third grade students and the longer adolescent form was administered to the sixth, ninth and twelfth grade students. The Semantic Differential, Adjective Check List, and Edwards Personal Preference Schedule were administered only to the sixth, ninth and twelfth grade students. The subjective paragraph was also restricted to the three higher grade levels. Table 1 shows the distribution of students completing the Self-Social Symbols Tasks at the five grade levels.

Classification and Scoring of Tests - The completed tests were delivered to the high school where they were picked up by the project director. All completed tests were then sorted and classified by grade, sex, and race. In a very few cases (less than 20) either the sex or race was impossible to determine from the information given on the test sheets. These cases were discarded. The NCS answer sheets for the Adjective Check List and the Edwards Personal Preference Schedule were carefully checked for the proper blackening of answer spaces, and incomplete erasures. These answer sheets were submitted to National Computer Systems in Minneapolis for computer scoring and reporting of means, variances and profiles for each grade, sex, and race subgroup.

The Self-Social Symbols Tasks and the Semantic Differential were distributed by grade to the two research assistants on the psychology staff and to the project director for scoring. They were assisted in the scoring by two psychology major students who were trained to score these tests. Each test scored was double-checked for accuracy by the project director. The entire summer of 1970 and the month of September were required to complete the scoring of these tests.

The subjective paragraphs were read by the project director and by the research assistants on the psychology staff. The answer to the question "What kind of person am I right now?" was classified as positive (+), neutral (0), negative (-) or no response (NR). The traits listed in response to the two questions, "What are the things that I like about myself?" and "What are the things that I dislike about myself?" were classified in the following categories: Physical (P), Mental (M), Emotional (E), Behavioral (B), Social (S), Religious (R), Other (O), and No Response (NR). The answers to the question "What would I be like if I could be any kind of person I wanted?" were classified in the same categories plus an additional category of Same (SA) for responses that indicated no desire for a change from the present kind of person. Time did not permit the determination of the reliabilities of these classifications.

Treatment of the Data - The total scores on all scales of the Self-Social Symbols Tasks were tabulated for each student within each grade, sex, and race category. Also each student was designated as upper (U) or lower (L) socioeconomic class according to a more or less arbitrary evaluation of the occupation reported for both parents. No attempt was made to utilize the socioeconomic variable in the subsequent statistical analyses since a preponderance of both racial subgroups fell in the lower socioeconomic category.

The total scores on the evaluative, potency, and activity scales of the Semantic Differential for the self, ideal self, mother, father, teacher, and friends, were tabulated for each student within each grade (6, 9, 12) sex and race category. Also the ratings of each of these persons on the black-white scale were tabulated in the same way.

From the tabulations within each grade, sex, and race subgroup, sums of scores, means, sums of squares, and sums of scores squared, were determined on a Monroe 990 Electronic Calculator. Each determination was double-checked by the project supervisor for accuracy. These same values were furnished by National Computer Systems for each scale of the ACL and the EPPS. These values enabled the statistical comparison of specific subgroup means, and also an overall analysis of variance treatment of all of the subgroups simultaneously.

The category assignments for each of the questions answered in the subjective paragraph were tabulated within each grade (6, 9, 12) sex and race subgroup. The percentage of cases falling within each category were determined for each subgroup, thus enabling a statistical comparison of the subgroups.

A summary tabulation of sums of scores, number of cases, means, sums of squares of scores, and sums of scores squared was prepared for each variable (scale) of each instrument within the grade, sex, and race subgroups. From these summary table means, graphic comparisons between black-white subgroups, male-female subgroups, and grade subgroups were made. Differences observed in the graphic comparisons were evaluated for statistical significance using the conventional parametric z-test for large samples.

An additional analysis of variance was performed for any scale that showed significant differences between means at different grade levels in order to identify and evaluate possible interactions.

On the subjective paragraph data, the percentages in each of the response categories were compared between grade, sex, and race subgroups. Differences between subgroup percentages were evaluated using the conventional z-test.

V. RESULTS:

A. The Self-Image As Measured By The Self-Social Symbols Tasks

(1) Self-esteem - Two scales in the Self-Social Symbols Tasks purport to measure self-esteem. It is assumed that a placement of the self in the extreme left position of a horizontal arrangement and in the extreme top position of a vertical arrangement indicates high self-esteem. and that conversely placement of the self in the extreme right position on the horizontal and in the bottom position of the vertical arrangement indicates low self-esteem. Both of these scales were used at all five grade levels. High correlations between the two scales have been reported, but the question as to which is the more reliable scale has not yet been answered.

Figure 1 shows a comparison of the means of all black and white students on the horizontal scale at each of the five grade levels investigated, and Figure 2 shows the same comparison on the vertical scale. Both scales show a decrease in self-esteem from the kindergarten to the third grade for the white students. but only the vertical scale shows this decrease for black students. Only the horizontal scale shows a statistically significant difference between blacks and whites in self-esteem at the kindergarten level, with whites having higher self-esteem. Both scales agree in showing no significant difference at the third, sixth, and ninth grades between blacks and whites in self-esteem. At the twelfth grade, however, both scales show a higher self-esteem of blacks. This difference is significant at the .05 level on the horizontal scale, but does not quite achieve statistical significance on the vertical scale.

Figures 3 and 4 show analogous comparisons of all males and females. On the horizontal scale females show significantly higher self-esteem than males at all grade levels except the 9th grade, when their self-esteem is significantly lower than that of males. The vertical scale shows no significant difference between males and females at the kindergarten and third grade levels but significant differences between males and females at the 6th, 9th, and 12th grade levels.

With the exception of the period between the kindergarten and third grade, the self-esteem of all students, black, white, male and female, tends to increase from grade level to grade level, achieving its maximum at the 12th grade.

(2) Dependency or Social Interest - The dependency or social interest scale shows a consistent increase for all subgroups from the kindergarten to twelfth grade levels. This variable seems to be unequivocally a developmental variable, and in this context seems to indicate that it is a measure of social identification rather than a measure of dependency. Comparison of blacks and whites on this

variable shows a consistent statistically significant difference in favor of whites in terms of social interest. This finding agrees with the findings of previous investigations. (Long, Ziller and Henderson, 1967)

A comparison of males and females on this scale shows no significant differences at any grade level. The black-white comparisons are shown in Figure 5, while the male-female comparisons are shown in Figure 6.

(3) Individuation or Minority Identification - The individuation scale measuring the extent to which the person perceives himself as different from the group, the extent to which he perceives himself as a unique individual, shows a significant change in all subgroups as we proceeded from kindergarten to twelfth grade. The change is in the direction of increasing individuation as the child progresses through the grades. Table 7 shows significant differences at all levels except the 9th grade between the individuation of black and white students with black students showing less individuation at the kindergarten level than white students show, but more individuation at all higher levels (not statistically significant at the 9th grade level). Comparison of males and females reveals no difference between males and females until the sixth grade, when females show a higher degree of individuation and maintain it through the twelfth grade. The difference at the twelfth grade is not statistically significant. Table 8 shows the comparison between males and females on the individuation scale at the respective grade levels.

(4) Identification with Mother - On all of the identification scales the lower the number the greater the degree of identification. For all subgroups identification with the mother was least at the kindergarten level, became increasingly greater through the third and sixth grades, then became less at the ninth and twelfth grades. The racial comparison presented in Figure 9 shows significantly less identification of black children with the mother than white only at the kindergarten level. The sex comparison in Figure 10 shows significantly greater identification of females with the mother than males only at the third grade level.

(5) Identification with Father - The pattern of change in the degree of identification with the father from grade to grade is similar to that observed for the mother. Least identification with the father occurs at the kindergarten level in all subgroups; identification with the father progressively increases through the third and sixth grades then becomes less at the ninth and twelfth grade levels. Black children identify less with the father than white children at all grade levels except the twelfth, where the difference is in the same direction but does not quite achieve statistical

significance. Figure 11 reveals that the patterns of change for the two race subgroups are strikingly similar. The sex comparison presented in Figure 12 shows the females to identify significantly less with the father than males at the third and ninth grade levels, but to identify significantly more than males at the twelfth grade level.

(6) Identification with Teacher - All subgroups showed less identification with the teacher than with any of the significant others (mother, father, friends). This lack of identification with teacher was most pronounced at grades 6 and 9 for all subgroups. The comparison of black and white students on this variable presented in Figure 13 shows significantly less identification with the teacher on the part of black students at the sixth and ninth grade levels. The difference, in the same direction, at the twelfth grade level is not statistically significant. No differences are found at the kindergarten and third grade levels. The male-female comparison in Figure 14 shows significantly greater female identification with the teacher at all grades except the sixth, at thich level the female shows a sharp decrease in identification with teacher.

(7) Identification with Friends - All subgroups showed a general trend toward increased identification with friends at each successive grade level. Figure 15 shows that no significant black-white differences occur until the sixth grade, at which level the black students identify less with friends than do white students. This difference in the same direction remains statistically significant at the ninth and twelfth grade levels. The male-female comparison in Figure 16 shows no significant sex differences in identification with friends until the ninth grade, at which level and thereafter the females show significantly greater identification with friends than do males.

(8) Power - No racial differences were found in the power attributed to the self. A significant increase in this variable from the kindergarten to the third grade level for both racial groups is shown in Figure 17. Thereafter the power attributed to the self shows no significant change through the remaining grade levels. The male-female comparison in Figure 18, however, shows significant differences in opposite directions at the third and ninth grade levels. Third grade boys attribute more power to the self than do girls, but ninth grade boys attribute strikingly less power to the self than do girls. No sex difference on this scale exists at the twelfth grade level.

(9) Realism (Color) - Only the primary form of the Self-Social Symbols Tasks was scored for realism as to color. Figure 19 shows a large and significant difference between black and white students at the kindergarten level, with black chil-

dren showing less realism. This difference has disappeared at the third grade. There is no significant change in the white group from the kindergarten to third grade. In the sex comparison presented in Figure 20 there is no significant difference between boys and girls at either grade level, although a slight and barely significant increase in realism from kindergarten to the third grade is observed in the male subgroup.

(10) Centrality - The centrality scale appears only in the adolescent form of the Self-Social Symbols Tasks, therefore, this variable was measured only at the three higher grade levels. Figure 20 shows no significant change in this variable from the sixth to the twelfth grade in the white subgroup, and no significant differences between the white and black subgroups at the sixth and ninth grade levels, but a striking decrease of centrality in the black group at the twelfth grade level, with a statistically significant difference between black and white students appearing at that level. The sex comparison presented in Figure 21 shows significantly greater centrality of the self for girls at the kindergarten level than for boys. For girls centrality declines through the ninth and twelfth grades. Boys show little change across the three grade levels, and no significant differences between the sexes appear at the ninth and twelfth grades.

(11) Complexity - The complexity scale occurs only in the adolescent form of the Self-Social Symbols Tasks, therefore, this variable was measured only at the upper three grade levels. A fairly high level of complexity was observed for all groups and little change occurred across the three grade levels. Figure 23 shows no significant black-white difference at any level. Figure 24, however, reveals significant male-female differences at the sixth and twelfth grades with girls at the sixth grade level showing less complexity than boys, but increasing through the ninth and twelfth grades until at the last level they show greater complexity than boys. The boys show a slight, but significant decrease in complexity from the sixth to the twelfth grade.

(12) Grouping (Scales I and II) - The grouping scales occur only in the adolescent form. Scale I measures the extent to which the self is grouped with others on four occasions while Scale II measures the extent to which the parents are included in the group with the self on two occasions. There appears to be a slight trend in all subgroups for less extensive grouping to occur as we move from the sixth to the twelfth grade. This trend is more pronounced with black students and at the twelfth grade level Figure 25 shows the group range for black students to be significantly less than that for white students. Figure 26 shows no significant sex differences on this variable. A similar trend of diminishing tendency to include the parents

in the group with the self is seen in Figures 27 and 28. The former shows no significant black-white difference at any grade level, while the latter shows a significantly greater tendency on the part of girls at the sixth grade level to exclude parents from the group with self. This difference has disappeared at the twelfth grade level.

B. The Self-Image As Measured By The Semantic Differential

(1) The Evaluative Scale - The Evaluative Scale of the Semantic Differential applied to the concept ME, or the self, should yield measures comparable to those obtained with the Horizontal and Vertical Esteem scales of the Self-Social Symbols Tasks. The results, in part, tend to confirm this expectation. Since the grade range covered by the Semantic Differential was from sixth to twelfth grade, comparisons are restricted to these grade levels. For all subgroups the self is rated rather high across all three levels (a mean rating of 6 out of a possible 7). There is little perceptible change from level to level except in the black subgroup which shows a significant increase in self-evaluation from the sixth to the twelfth grade.

Figure 29 shows significant differences between the black and white means at both the sixth and twelfth grade levels, but in opposite directions; the black mean is lower than the white mean at the sixth grade, but significantly higher than the white mean at the twelfth grade. This same pattern was observed on the Esteem scales of the Self-Social Symbols Tasks. The male-female comparison on this scale reveals no significant difference between the sexes. Figure 30 shows the female means to be higher than the male means at all three grade levels, but never to a statistically reliable degree. The male-female reversal observed at the ninth grade level with the Esteem scales, does not appear here.

Ratings of the ideal self on the evaluative scale also change little across the three grade levels, although a small but significant dip at the 9th grade is seen in all subgroups. Figure 31 shows no significant racial differences, while Figure 32 shows the female ratings of the ideal self to be higher at all grade levels than the male ratings but only at the ninth grade does the male-female difference achieve statistical significance.

(2) The Potency Scale - The Potency Scale of the Semantic Differential should be comparable with the Power scale of the Self-Social Symbols Tasks. The results, however, indicate that these two scales are measuring different aspects of the self-image. All subgroups show a small but insignificant increase on the Potency scale from the sixth to twelfth grade while an opposite but insignificant (except for ninth grade males) trend is seen on the Power

scale of the Self-Social Symbols Tasks. Figure 33 shows no significant racial difference at any of the three grade levels. Figure 34 shows striking and highly significant sex differences at all three grade levels; the female self-ratings of potency are lower than those of males. Comparison of black-white ratings of the ideal self on this scale shown in Figure 35 reveals a significantly lower mean for black students than for whites at the sixth grade level, but no differences at the ninth and twelfth grade levels. The male-female comparison presented in Figure 36 shows significantly lower female potency ratings of the ideal self at all three grade levels.

(3) The Activity Scale - Ratings of the self on the Activity scale show no significant change from the sixth to twelfth grade. Figures 37 and 38 respectively show no race nor sex differences at any grade level on this variable. Ratings of the ideal self on the Activity scale show no difference between black and white students or between males and females at the sixth grade level. Black students rate the ideal self significantly lower than white students and females rate the ideal self lower than male at the ninth and twelfth grade levels as shown in Figures 39 and 40.

(4) The Black-White Scale - This scale was introduced only to evaluate the extent to which each of the two racial subgroups accepted its racial identity. This can be determined by comparing the ratings of the self and the ideal self on the black-white dimension. Deviation of the ideal self rating in the direction of the opposite color may be interpreted as rejection of the color of the self. In Figure 41 the mean ratings of both concepts, self and ideal self, are compared for both subgroups at each of the three grade levels. This comparison shows the white self and ideal self ratings to be identical at the sixth grade level, but at the ninth and twelfth grades the ideal self rating becomes significantly less white than the self rating. The black subgroup shows no significant difference between the self and ideal self ratings at any of the three grade levels, but significant changes occur in both ratings from the sixth to the ninth grade in the direction of less black and from ninth to the twelfth in the direction of more black.

C. The Self-Image as Measured By The Gough Adjective Check List.

Only four scales of the ACL were used to measure the self-image at the sixth, ninth and twelfth grade levels. These were respectively, the number of adjectives checked (NCKD), the number of favorable adjectives checked (FAV) the number of unfavorable adjectives checked (UFAV), and the self-confidence scale (SCFD).

(1) The Number Checked Scale - The number of adjectives checked as descriptive of the self shows a general trend of increase from the sixth to the twelfth grade. In the comparison between black and white students presented in Figure 42, the white subgroups show a significant increase in adjectives checked between each of the three grades; the black subgroups fail to show an increase between the sixth and ninth grades (in fact the black subgroup has a lower mean at the ninth grade than at the sixth). Black students check significantly fewer adjectives than white students at the ninth grade level. At the twelfth grade the number of adjectives checked by black students is three below the number checked by whites, but this difference is not statistically significant. The male-female comparison presented in Figure 43 show females checking significantly fewer adjectives than males at the sixth grade, but more than males at the ninth and twelfth grades, although the difference at the ninth and twelfth grade levels are statistically insignificant. The differences between the adjacent grade levels for number of adjectives checked are all significant for girls; only the difference between ninth and twelfth grade is significant for the boys.

(2) The Favorable Scale - The mean number of favorable adjectives checked as descriptive of the self shows a significant progressive increase from sixth to ninth to twelfth grade for all subgroups. Figure 44 shows significant differences at the sixth and ninth grade levels between black and white students, with black students checking fewer favorable adjectives. At the twelfth grade the black students show a higher mean of favorable adjectives checked, but the difference is not statistically significant. The male-female comparison presented in Figure 45 shows no significant sex differences on this variable at any grade level, although the female mean is above the male mean at each of these grade levels.

(3) The Unfavorable Scale - The number of unfavorable adjectives checked as descriptive of the self shows irregular changes from the sixth to ninth to twelfth grades in the different subgroups. In Figure 46 the white subgroup shows significantly fewer unfavorable adjectives checked than the black subgroup at the sixth grade, an insignificantly greater number than blacks at the ninth grade, and a significantly greater number than the black subgroups at the twelfth grade. The black subgroups show significant differences between adjacent grade levels with the sixth grade having the highest mean and the ninth grade the lowest. The white subgroups have the lowest mean at the sixth grade and the highest at the twelfth grade. The male-female comparison presented in Figure 47 shows females at the sixth grade checking significantly fewer unfavorable adjectives as descriptive of the self than boys. No

significant sex differences appear at the ninth and twelfth grade levels.

(4) The Self-Confidence Scale - All subgroups show a significant increase from grade level to grade level on the self-confidence scale. The black self-confidence means presented in Figure 48 are below the white means at all three grade levels, but only the difference at the ninth grade level is statistically significant. Figure 49 shows the female self-confidence means to be significantly lower than the male means at all three grade levels.

D. The Self-Image as Measured by The Edwards Personal Preference Schedule

Although the Edwards Personal Preference Schedule does not afford a direct measure of any aspect of the self-image, it does provide, through self-expressed preferences, a measure of the relative strengths of certain psychological needs of which the respondent may or may not be aware. An assessment of these need-strengths, therefore, provides a self-revealed picture of the motivational structure underlying the self-image. One method of using the profile of fifteen psychological needs is to identify the three highest and three lowest scale series in the profile. In this way a pattern of dominant and inconsequential need strengths may be established. Examination of Figures 50 through 55 will reveal the three dominant needs from grades 6 through 12 to be Order, Succorance, and Endurance at grade 6; Abasement, Aggression, and Succorance (except for the black students, with whom Order is the highest) at grade 9; and Abasement, Aggression and Heterosexuality at grade 12. The minimal needs of these grade levels are respectively Intraception, Dominance and Heterosexuality at the sixth grade; Dominance, Achievement, and Intraception at the ninth grade, and Dominance, Achievement and Deference at the twelfth grade. Black-white comparisons in these figures show black means to be significantly higher than white means at the sixth grade level on Achievement, Deference, Order and Autonomy, and significantly lower than white means on Exhibition, Affiliation, Abasement, Nurturance and Change at the ninth grade; black students still show higher means in Achievement, Deference and Order, but lower means in Exhibition, Affiliation, Nurturance, and Heterosexualtiy than white. At the twelfth grade the black mean is significantly higher than the white only in the Order scale. It is significantly lower than the white mean on the Exhibition, Autonomy and Succorance scales. Male-female comparisons at the sixth grade show significantly higher male means in Deference, Succorance, and Abasement, but significantly lower male means in Achievement, Autonomy, and Dominance. At the ninth grade the male mean is significantly higher than the female in Deference, Exhibition, Succorance, Abasement and Endurance. It is significantly lower than the female mean in

Autonomy, Intraception and Heterosexuality. At the twelfth grade the male mean is significantly higher than the female mean in Deference, Order, and Endurance. It is significantly lower than the female mean in Autonomy, Intraception and Heterosexuality. At the twelfth grade the male mean is significantly higher than the female mean in Deference, Order, and Endurance; while the female mean is significantly higher than the male mean in Autonomy, Nurturance, Change, and Heterosexuality. Comparisons across the grades show a decrease in the needs for Deference and Endurance, and an increase in the needs for Change, Intraception and Heterosexuality from the sixth to the twelfth grade.

E. The Self-Image as Measured by The Subjective Questionnaire

The responses to the four questions (1) What kind of person am I right now? (2) What things do I like about the kind of person that I am now? (3) What things do I dislike about the kind of person I am now? (4) If I could be any kind of person I wanted, what would I be like?, are shown in Tables 2 through 9.

TABLE 2
Comparison of Responses of All Black and White Students at Three Grade Levels to Question: "What Kind of Person am I?"

Grade		Type of Response: Positive %	p	Neutral %	p	Negative %	p	No Response %	p
6	White	66	NS	19	NS	13	NS	2	NS
	Black	66		22		8		4	
9	White	72	NS	13	NS	11	NS	4	NS
	Black	67		17		6		10	
12	White	64	.01	19	.01	10	NS	7	NS
	Black	83		4		5		8	

Table 2 compares black and white students at the sixth grade level with respect to the type of response to question 1, "What kind of person am I right now?" The responses rated as positive are identical in percentage occurrence for blacks and whites at the sixth grade. At the ninth grade the black percent is lower than the white by 5 percentage points, which is statistically insignificant. At the twelfth grade level 83 percent of the black responses are positive in comparison with 64 percent of the white responses. This difference is statistically significant at the .01 level of confidence.

TABLE 3

Comparison of Responses of All Black and White Students at Three Grade Levels to Question: "What things do I like about myself?"

GRADE		Characteristics Liked															
		Phy		Men		Emo		Behav		Soc		Rel		Other		None	
		%	p	%	p	%	p	%	p	%	p	%	p	%	p	%	p
6	White	37	NS	8	.01	10	.01	16	NS	19	NS	2	NS	8	NS	18	NS
	Black	39		3		3		20		24		0		11		13	
9	White	20	NS	10	NS	9	NS	23	NS	28	NS	5	NS	5	NS	16	NS
	Black	15		12		13		26		24		4		6		22	
12	White	9	NS	8	NS	7	NS	36	NS	30	NS	2	NS	8	NS	19	NS
	Black	14		6		3		35		37		2		3		14	

Table 3 shows the comparison of all black and white students at three grade levels with respect to responses to the question, "What things do I like about the person I am now?". The traits were arbitrarily categorized according to the following scheme: Physical, Mental, Emotional, Behavioral, Social, Religious, and Other. The total of all specific traits mentioned was used as the basis for determining the percentages shown in the table. Examination of this table reveals differences between grade levels in the relative importance of several traits. For example, physical traits tend to decline in importance, while behavioral and social traits tend to increase in importance from the sixth to the twelfth grade. At the sixth grade the category of physical traits yields the highest percentage of characteristics liked with social and behavioral traits ranking second and third in importance. At the ninth and twelfth grades, however, social and behavioral traits lead all categories with about equal percentages, while physical traits rank third in importance. A similar pattern of importance appears among the categories of traits disliked shown in Table 4. Physical and behavioral traits rank highest in importance at the sixth grade. At the ninth and twelfth grades, however, behavioral and emotional characteristics are most frequently disliked, while physical traits decline in importance. Significant differences between black and white students in characteristics liked appear only at the sixth grade. Table 3 shows white students to like significantly more mental and emotional traits than black students. In response to the question concerning traits disliked, significantly higher percentages of black students list "None" than do white students at the sixth and ninth grades. Significantly more characteristics in the emotional category are listed as disliked by white students than by black students only at the twelfth grade level.

TABLE 4

Comparison of Responses of All Black and White Students at Three Grade Levels to Question: "What things do I dislike about myself?"

Characteristics Disliked

GRADE		Phy %	p	Men %	p	Emo %	p	Behav %	p	Soc %	p	Rel %	p	Other %	p	None %	p
6	White	35	NS	7	NS	11	NS	23	NS	13	NS	2	NS	9	NS	31	.05
	Black	26		7		12		32		11		0		12		41	
9	White	17	NS	9	NS	29	NS	31	NS	11	NS	1	NS	2	NS	29	.01
	Black	10		9		29		36		8		2		5		42	
12	White	10	NS	5	NS	28	.01	39	NS	12	NS	0	NS	6	NS	30	NS
	Black	13		8		9		39		19		1		11		37	

TABLE 5

Comparison of Responses of All Black and White Students at Three Grade Levels to Question: "What kind of person would I be if I could be what I would like to be?"

Characteristics Desired

GRADE		Same		Phy		Men		Emo		Beh		Soc		Rel		Other		None	
		%	p	%	p	%	p	%	p	%	p	%	p	%	p	%	p	%	p
6	White	15	NS	30	NS	7	NS	8	NS	14	NS	29	.05	2	NS	10	NS	9	.05
	Black	19		23		4		4		19		40		1		9		15	
9	White	23	NS	28	NS	13	NS	11	NS	20	NS	24	NS	1	NS	3	NS	11	.01
	Black	23		29		10		11		15		27		3		5		20	
12	White	30	NS	9	NS	11	NS	17	NS	20	NS	23	NS	4	NS	18	NS	14	NS
	Black	35		12		11		4		14		41		2		19		14	

Table 5 reveals a similar pattern of importance among the traits attributed to the ideal self. Social and physical traits rank highest in importance at the sixth grade and the ninth grade, while at the twelfth grade social and behavioral traits are most frequently desired in the ideal self, with a sharp decline in the frequency of physical traits mentioned. This table also shows an increase in the percentage of students attributing the same characteristics that they already have to the ideal self, from the sixth to the ninth to the twelfth grade. White students at the twelfth grade desire significantly more emotional traits in the ideal self than do black students. Black students at the sixth and twelfth grades desire significantly higher proportions of social traits in the ideal self than do white students. Significantly more black students than white students assign no traits to the ideal self at the sixth and ninth grades, but not at the twelfth grade.

Tables 6 through 9 compare male and female responses to the same four questions.

TABLE 6

Comparison of Responses of All Male and Female Students at Three Grade Levels to Question: "What kind of person am I?"

GRADE		Type of Response: Positive %	p	Neutral %	p	Negative %	p	No Response %	p
6	Male	67	NS	19	NS	11	NS	3	NS
	Female	63		21		13		3	
9	Male	69	NS	14	NS	8	NS	9	.01
	Female	72		13		12		3	
12	Male	74	.05	9	.01	5	.01	12	.01
	Female	63		21		13		3	

Table 6 shows an increase in positive responses for males from the sixth to the ninth grade and from the ninth to the twelfth, while females increase from the sixth to the ninth, but show an equal decrease from the ninth to the twelfth. Males show significantly more positive responses than females only at the twelfth grade level and significantly fewer neutral and negative responses than females at the same level. Significantly more males than females give no response to this question at the sixth and ninth grades.

TABLE 7

Comparison of Response of All Male and Female Students at Three Grade Levels to Question: "What things do I like about myself?"

Characteristics Liked

GRADE		Phys %	p	Ment %	p	Emot %	p	Behav %	p	Soc %	p	Rel %	p	Other %	p	None %	p
6	M	42	.01	9	NS	3	.01	15	NS	20	NS	1	NS	10	NS	12	.01
	F	33		6		12		19		20		2		8		22	
9	M	22	.01	12	NS	12	NS	23	NS	17	.01	6	NS	8	NS	25	.01
	F	16		9		9		23		35		4		4		11	
12	M	12	.NS	8	NS	1	.01	37	NS	29	NS	2	NS	11	.05	21	.01
	F	9		6		9		35		34		2		5		15	

Table 7 compares male and female responses to the question, "What things do I like about myself?". It reveals a decline in importance of physical characteristics from the sixth to the twelfth grade, and a corresponding increase in the importance of behavioral and social characteristics. Males mention significantly more physical characteristics of the self as liked than do females at the sixth and ninth grades, but not at the twelfth grade. Females mention more emotional traits as characteristics liked at the sixth and twelfth grades but not at the ninth. Females at the sixth grade mention more social traits as liked than males. Significantly more females than males make no response to this question at the sixth grade, but significantly more males than females list no characteristics as liked at both the ninth and twelfth grade levels.

TABLE 8

Comparison of Responses of All Male and Female Students at Three Grade Levels to Question: "What things do I dislike about myself?"

Characteristics Disliked

GRADE		Phys %	p	Ment %	p	Emot %	p	Behav %	p	Soc %	p	Rel %	p	Other %	p	None %	p
6	M	32	NS	8	NS	8	NS	29	NS	9	.05	3	NS	11	NS	53	.01
	F	34		6		13		22		15		1		9		29	
9	M	20	.05	12	NS	22	.05	33	NS	9	NS	1	NS	3	NS	40	.01
	F	12		8		33		32		12		1		2		24	
12	M	12	NS	7	NS	13	.01	46	.05	12	NS	0	NS	10	NS	39	.01
	F	9		5		31		35		14		1		5		25	

Table 8 shows a general decline in importance of physical traits from the sixth to ninth to twelfth grade and a general increase inimportance of behavioral characteristics across the same three grade levels. Comparisons between male and female percentages in Table 8 show significantly more physical traits mentioned as disliked by males than females at the ninth grade; more emotional traits mentioned as disliked by females than males at the ninth and twelfth grades; more behavioral traits listed as disliked by males than females at the twelfth grade; more social traits listed as disliked by females than males at all grades but to a statistically significant degree only at the sixth grade. Significantly more males than females list no characteristics in response to this question at all three grade levels.

TABLE 9

Comparison of Responses of All Male and Female Students at Three Grade Levels to Question: "What kind of person would I be, if I could be what I would like to be?"

		Characteristics Desired																	
GRADE		Same		Phys		Ment		Emot		Behav		Soc		Rel		Other		None	
		%	p	%	p	%	p	%	p	%	p	%	p	%	p	%	p	%	p
6	M	15	NS	29	NS	4	.05	5	.05	16	NS	32	NS	1	NS	13	.05	12	NS
	F	18		29		8		9		14		31		2		7		9	
9	M	23	NS	37	.01	18	.01	8	NS	14	.01	17	.01	2	NS	4	NS	16	.05
	F	23		23		10		12		22		28		1		4		10	
12	M	33	NS	13	NS	13	NS	7	.05	17	NS	20	.05	2	NS	28	.01	18	.05
	F	30		8		9		19		20		32		1		11		11	

Table 9 shows no consistent changes across the three grade levels except in the percentages of both males and females desiring in the ideal self the same traits that they already possess. The "Same" response increases significantly from the sixth to the ninth to the twelfth grade. No significant differences between males and females appear at any grade level with respect to this response category. Only at the ninth grade do males desire a significantly higher proportion of physical traits than females. Significantly more mental traits are desired by females than by males at the sixth grade, but a reversal appears at the ninth grade with the males desiring a higher proportion of traits in this category. Females at the sixth and ninth grades list more emotional traits desired in the ideal self than do males; more behavioral traits than males at the ninth grade only;

and more social traits than males at the ninth and twelfth grades. Significantly more males than females assign no traits to the ideal self at the ninth and twelfth grade levels.

F. Comparison of Black and White Students, Both Sexes at All Three Grade Levels Combined on Semantic Differential Evaluative Ratings of Self, Ideal Self, and Significant Others.

In Figure 56 is presented a comparison of all black students with all white students at the sixth, ninth and twelfth grades combined with respect to the ratings on the evaluative scale of the Semantic Differention given to the self, the ideal self, mother, father, teacher and friends. Examination of this figure reveals that both black and white groups rate these concepts in exactly the same rank order: the mother is rated highest, then in descending order the ideal self, the father, the self, friends, and last, the teacher. Although all of the black means are below the white means the differences between the two groups' evaluation of the self, the ideal self, and the mother are small and not statistically significant. However, black students evaluate father, teacher, and friends significantly lower than do white students. All three of these differences are statistically reliable at the .01 level of confidence.

G. Comparison of Male and Female Students, Both Races at All Grade Levels Combined by Semantic Differential Evaluative Ratings of Self, Ideal Self, and Significant Others.

Figure 58 shows a similar comparison of all male students with all female students at the three grade levels combined. Inspection of this figure reveals significant differences between the sexes in the evaluative ratings given the ideal self, the teacher, and friends. Females evaluate all three of these concepts significantly higher than do males. No significant differences between male and female evaluations of the self, mother, or father occur.

H. Analyses of Variance on Five Scales of the Self-Social Symbols Tasks.

An analysis of variance was conducted on each scale of the Self-Social Symbols Tasks showing significant differences across the five grade levels. These were the Horizontal and Vertical Esteem, the Dependency, the Individuation, and the Identification with Friends scales. The results of these analyses are presented in Tables 10 through 14.

Inspection of Table 10 reveals significant main effects due to sex and grade level on the Horizontal Esteem scale, but no significant effect attributable to race. The interactions

between race and grade level, sex and grade level, and race, sex and grade level are all significant. No significant interaction between sex and race occurs. The nature of the sex and grade differences in Horizontal Esteem, and the nature of the race x grade and sex x grade interactions may be seen in Figures 1 and 3.

TABLE 10
Analysis of Variance of Students at Five Grade Levels on Horizontal Esteem Scale

Source	Sum of Squares	DF	Variance	F	P
A. RACE	8.4	1	8.39	--	NS
B. SEX	673.9	1	673.92	14.69	.01
C. GRADE	4501.4	4	1125.35	24.54	.01
AXB	23.9	1	23.87	--	NS
AXC	762.4	4	190.61	4.16	.01
BXC	985.8	4	246.44	5.37	.01
AXBSC	482.3	4	120.58	2.63	.05

TABLE 11
Analysis of Variance of Students at Five Grade Levels on Vertical Esteem Scale

Source	Sum of Squares	DF	Variance	F	P
A. RACE	43.5	1	43.46	--	NS
B. SEX	157.3	1	157.34	3.32	NS
C. GRADE	6393.7	4	1598.42	33.76	.01
AXB	77.8	1	77.79	1.64	NS
AXC	288.4	4	72.10	1.52	NS
BXC	1137.6	4	284.40	6.01	.01
AXBSC	286.5	4	71.63	1.51	NS
WITHIN	120,568.9	2547	47.34		
TOTAL	128,953.7	2566			

The analysis of variance on the Vertical Esteem scale presented in Table 11 shows only one significant main effect, that attributable to grade level, and only one significant interaction, that between sex and grade level. The discrepancy between the results obtained with the two scales suggests that the vertical scale may be less valid, or less sensitive than the horizontal scale in measuring self-esteem.

TABLE 12
Analysis of Variance of Students at Five Grade Levels on Dependency Scale

Source	Sum of Squares	DF	Variance	F	D
A. RACE	302.4	1	302.40	80.85	.01
B. SEX	1.3	1	1.27	--	NS
C. GRADE	3241.7	4	810.44	216.69	.01
AXB	2.5	1	2.50	--	NS
AXC	0.0	4	0.00	--	NS
BXC	20.9	4	5.22	1.39	NS
AXBXC	0.0	4	0.00	--	NS
WITHIN (error)	9524.3	2547	3.74		
TOTAL	13,093.1	2566			

The analysis of variance on the Dependency scale presented in Table 12 reveals significant main effects attributable to race and grade level, but not to sex. No significant interactions are found on this scale. The nature of the race and grade level differences may be seen in Figure 5. Dependency or Social Interest increases at each successive grade level, and white students are higher than black students on this variable at every grade level.

The analysis of variance on the Individuation scale presented in Table 13 shows significant main effects attributable to race, sex, and grade, with a significant interaction between race and grade. The nature of the race difference and the interaction between race and grade level may be seen in Figure 7. Black students show less individuation than white students at the kindergarten, but more individuation than white students at the remaining four grade levels. Figure 8 shows greater individuation for females than males to a statistically significant degree only at the sixth grade.

TABLE 13
Analysis of Variance of Students at Five Grade Levels on Individuation Scale

Source	Sum of Squares	DF	Variance	F	D
A. RACE	34.4	1	34.40	5.67	.05
B. SEX	79.2	1	79.20	13.05	.01
C. GRADE	1522.0	4	380.51	62.69	.01
AXB	11.2	1	11.22	1.85	NS
BXC	43.8	4	10.94	1.80	NS
AXBXC	19.3	4	4.81	--	NS
WITHIN (error)	15,462.7	2547	6.07		
TOTAL	17,259.4	2566			

TABLE 14
Analysis of Variance of Students at Five Grade Levels on Identification w/Friends Scale

Source	Sum of Squares	DF	Variance	F	D
A. RACE	231.4	1	231.38	15.40	.01
B. SEX	52.1	1	52.09	3.47	NS
C. GRADE	2680.7	4	670.17	44.62	.01
AXB	47.7	1	47.71	3.18	NS
AXC	189.8	4	47.46	3.16	.05
BXC	233.3	4	58.32	3.88	.01
AXBXC	68.4	4	17.09	1.14	NS
WITHIN (error)	38,257.5	2547	15.02		
TOTAL	41,760.9	2566			

Table 14 shows significant race and grade differences on the Identification with Friends scale, and significant interactions between race and grade, and sex and grade. Figure 15 shows race differences to be in the direction of greater identification with

friends on the part of white students which is significant from the sixth grade on. The black students show higher identification with friends at the kindergarten level but not to a statistically significant degree. Both groups show increasing identification with friends from the kindergarten to the twelfth grade, but at different rates. Figure 16 reveals the nature of the sex x grade interaction in which females show no difference from males at the first two grade levels, a slight and insignificant lesser identification with friends than males at the sixth grade, and significantly greater identification with friends than males at both the ninth and twelfth grades. The differences at these two levels are insufficient to produce an overall significant sex difference for all five grade levels.

VI. DISCUSSION AND CONCLUSIONS

A. Self-Esteem as Measured by the Self-Social Symbols Tasks, the Semantic Differential and the Adjective Check List.

A cautionary statement is in order before proceeding to a discussion and interpretation of the data. There is a strong temptation to draw developmental conclusions from cross-sectional studies such as this one. Even the language that one uses in presenting the results implies changes taking place in a single student as he moves from the kindergarten to the twelfth grade. The change, however, is not observed in a single student as he grows, but the change is in the self-image possessed by different students at different levels of growth and education. We may suspect that an orderly progression of data points over the grade levels is indicative of a developmental trend. But this suspicion must await confirmation by longitudinal studies. Cross-sectional studies can only suggest, but never confirm developmental hypotheses.

Self-esteem was measured at all five of the grade levels studied by the Horizontal and Vertical Esteem scales of the Self-Social Symbols Tasks. Measures similar to the self-esteem measurement were provided by the evaluative scale of the Semantic Differential and by the Favorable and Unfavorable Adjectives Checked scales of the Adjective Check List. The Esteem scales of the Self-Social Symbols Tasks were the only measures of esteem made at the kindergarten and third grade. The horizontal esteem measure showed a difference between black and white students at the kindergarten level with black children obtaining a significantly lower mean than white children. The vertical esteem scale failed to show this difference, which leads one to question the validity of one of these scales. The vertical scale seems to have less reliability at the lower grade levels than at the three higher levels, which suggests that it is a less valid and less sensitive scale for measuring self-esteem than is the horizontal scale, which appears to be equally reliable at all grade levels. The vertical scale shows no significant race differences at any grade level while the horizontal scale shows significantly higher white self-esteem at the kindergarten level

and higher black esteem at the twelfth grade. Both scales show higher female self-esteem at the sixth and twelfth grades with intervening lower female esteem at the ninth grade. The significant drop in self-esteem observed for females at the ninth grade suggests that this may be a problem period for females. The horizontal scale shows self-esteem significantly higher for females at all grade levels except the ninth. The Evaluative Scale of the Semantic Differential shows a significantly higher black evaluation of the self at the twelfth grade which supports the finding with the Horizontal Esteem scale. The Adjective Check List also shows more favorable adjectives checked by blacks than whites (NS) and fewer unfavorable adjectives checked by blacks than whites only at the twelfth grade. Significantly more favorable adjectives are checked by whites than by blacks at the sixth and ninth grades, and fewer unfavorable adjectives are checked by whites at the sixth grade. All of these results taken together suggest a slightly lower self-esteem on the part of blacks at the lower educational levels with a steady increase through the grades until at the twelfth grade it is significantly higher than that of whites. It was suspected that this difference at the twelfth grade might be partly accounted for by selective attrition among black students, but no evidence for this was found when a comparison was made of the percentages of black students in each of the grades. Black students furnish 23% of the twelfth grade enrollment, while the maximum percentage at any lower grade level was 29%. It should be emphasized that the self-image of all grade levels and in all subgroups was positive as measured by all three instruments, and it showed an increase in the positive direction at each successive grade level, except for the single exception of the female drop in self-esteem at the ninth grade. The general conclusions suggested by all of the data are (1) That over the range of grades measured, all grades combined, there is no significant race difference in self-esteem; (2) That over all the grades a tendency for females to show higher self-esteem than males is observed except at the ninth grade where female self-esteem is lower than that of males; (3) That at specific grade levels differences between blacks and whites in self-esteem are observed, notably at the kindergarten and the 12th grade, with black self-esteem appearing to be lower than that of whites at the kindergarten and higher than that of whites at the twelfth grade. These conclusions are supported by similar results reported by Wylie (1967), Hodgkins (1969) and Knight (1969).

B. Perception of the Self in Relation to Significant Others

An aspect of the self-image is revealed by the person's expression of his relationship to others who are important to him, namely his parents, his teacher, his siblings and his friends. The evaluative scale of the Semantic Differential provides an opportunity to compare the evaluation of the self or self-esteem with the esteem that one has for others. Also it enables the arrangement of significant others in a hierarchy of importance to the

individual. Both race groups and both sexes were found to make the same relative evaluations of significant others with respect to the self-evaluation. All groups rated the mother highest of all, even higher than the ideal self, on the evaluative scale, then the father, then the self. The white subgroup, and the female subgroup rated friends equal to the self. The black and male subgroups rated friends slightly lower than the self, and all subgroups rated the teacher lowest on this scale. No significant race differences in the rating of the self and the mother occurred, but blacks rated the father, friends and teacher significantly lower than whites. No significant sex differences occurred in the ratings of self, mother and father, but boys rated friends and teacher significantly lower than girls.

The identification-with-others scales of the Self-Social Symbols Tasks provides a similar measure of the desired relationship between the self and significant others. Again the ordering of persons was essentially the same for all subgroups with the closest identification observed with mother, next the father, next friends and least with the teacher. Both race and sex differences were observed with black children showing significantly less identification with the mother than white children at the kindergarten level; less identification with the father at all grade levels, less identification with friends and the teacher at the sixth, ninth and twelfth grade levels. Females show greater identification with mother than males at the sixth grade, less identification with father than males at the third and ninth grades, but greater identification with father at the twelfth grade. Females show greater identification with teacher than males at all grade levels except the sixth, and greater identification with friends at the ninth and twelfth grades.

The combined data from the two instruments of measurement suggest the following general conclusions: (1) That a similar hierarchy of esteem for and identification with significant others is common to both race and sex subgroups. Mother is held in highest esteem and identified with most closely. Father, friends, and teacher follow in that order. (2) Black children esteem father, friends and teacher lower than white children, and identify with them less closely than white children. (3) Females show an irregular tendency to identify more closely with teacher and friends than males. A problem area is suggested by the finding that blacks have less esteem for father, teacher and friends than whites, and tend to identify with them less than whites.

C. Individuation, Social Interest, and Grouping

These scales in the Self-Social Symbols Tasks all measure the person's perception of himself as related to a group. The individuation scale measures his tendency to perceive himself the same or as different from the majority in a group. The Dependency or Social Interest scale measures the extent to which he perceives himself to be a part of or outside of a group of significant others. The grouping scales measure the number and kinds of persons he would include in a group with himself. All subgroups tended to show an increase in ten-

dency to identify with the minority symbol in a group at each successive grade level, and a similar increase in the tendency to place the self inside the group of significant others. Black children showed a greater tendency for individuation or minority identification than white children at all grade levels except the kindergarten, at which level they showed significantly less minority identification than white children. Only one significant sex difference occurred at the sixth grade where females showed greater minority identification than males. The increment in means from grade to grade on the Dependency or Social Interest scale suggests that it is not a measure of dependency but rather a measure of identification with the group or social interest. Black children showed less social interest than whites at all grade levels. No sex differences appeared on this scale at any level. The grouping scale measuring number included in the group with the self, showed no consistent change across the three grade levels at which this scale was used. The only significant race difference observed on this scale was that black students included fewer persons in the group with the self only at the twelfth grade level. No sex difference occurred on this scale. The tendency to include the parents in the group with the self shows a decline over the three grade levels at which this scale was used. No significant race differences were observed on this scale. The only sex difference was observed at the ninth grade where males showed a significantly greater tendency than females to include the parents in a group with the self. The data furnished by these three scales suggest the following conclusions: (1) That both individuation and group identification imply maturational or developmental trends across the grades. All groups show increases in individuation and social interest from the kindergarten to the twelfth grade. (2) Black students show greater individuation and less social interest than white students. (3) Sex differences in individuation and social interest are negligible across the grades studied.

D. Power Ascribed to the Self

The power scale of the Self-Social Symbols Tasks and the Potency scale of the Semantic Differential both give measures of the perceived power or strength of the self. Both of these measures agree in showing an intermediate degree of power ascribed to the self with negligible change over the grades studied. No two scales produced discrepant results with respect to sex differences. The potency scale of the Semantic Differential showed large and significant differences in favor of male students at all grade levels, while the power scale of the Self-Social Symbols Tasks showed no such differences. In fact, on this scale the female students had significantly higher means than males at the ninth grade level. Although the data are equivocal with respect to sex differences, it may be safely concluded that no race differences in power ascribed to the self exist across the five grade levels.

E. Relative Importance of Traits Ascribed to the Self

Analysis of the responses obtained in the subjective paragraph produced a classification of characteristics liked in the self, characteristics disliked in the self, and characteristics desired in the ideal self. The determination of the percentage of traits in a specific category out of all of the traits mentioned, enabled a comparison of traits in the various categories as to their relative importance to the person. Across the three grade levels measured, physical characteristics show a decline from most important in the sixth grade to minor importance in the twelfth grade. Social and behavioral characteristic showed a corresponding increase in importance from the sixth to twelfth grade. No significant race differences were found for these traits liked or disliked, however, black students desired significantly higher proportions of social traits in the ideal self than whites. Sex differences were irregular and showed no pattern from grade to grade. It may be concluded that according to subjective data a decline in the importance of physical traits with an increase in the importance of social and behavioral traits occurs across the grade levels studied.

F. Relative Importance of Need Systems in the Motivational Structure of the Self

The Dominant need patterns derived from the EPPS shown at the various grade levels were respectively at the sixth grade, Order, Succorance and Abasement, at the ninth grade, Order, Succorance, Abasement and Aggression, and at the twelfth grade Succorance, Abasement, and Aggression. The need for abasement is dominant at all grade levels; the need for succorance is dominant at all grade levels. The need for order is dominant at the sixth and ninth grades, while the need for aggression is dominant at the ninth and twelfth grade levels. A decline in the need for order was observed across the three grade levels studied. The needs for abasement and for aggression show little change across the three grade levels. These results suggest a non-productive motivational structure. The needs for abasement and aggression are incompatible and may represent considerable internal conflict. The need for succorance is a dependent, passive orientation of the self. The need for order might lead to efficiency and productivity if it is properly channeled. The need patterns exhibited by this sample of students are disturbing in that they suggest the existence of guilt feelings leading to abasement, growing out of aggressive impulses which are either expressed or repressed.

VII. RECOMMENDATIONS

A review of the conclusions derived from the data of this study leads to the identification of seven problem areas of student development in the school system under consideration. These are

(1) The black-white differences in self-esteem at the kindergarten and twelfth grade levels.

(2) The black-white difference in evaluation of the father, teacher, and friends, and in identifying with these same significant others.

(3) The black-white difference in social interest at all grade levels.

(4) The female drop in self-esteem at the ninth grade.

(5) The female drop in identification with the teacher at the sixth grade.

(6) Low evaluation of the teacher and low identification with the teacher by all subgroups at all grade levels.

(7) The Abasement-Succorance-Aggression need pattern found in students at the sixth, ninth, and twelfth grade levels.

The assumption is made that wherever significant differences in self-esteem exist either between sex groups or between race groups, the group showing the lower self-esteem is at an educational disadvantage, and therefore a problem exists which calls for a solution by the administrators of the educational program. This position is supported by those findings which have shown academic achievement to be positively and highly correlated with self-esteem (Fink, 1962; Paschal, 1968; Piers and Harris, 1964; Caplin, 1968).

To deal remedially with the black-white differences in self-esteem at the kindergarten and twelfth grade levels it is recommended that a diagnostic survey of the content of self-attitudes be made at these two grade levels to determine the nature of the discrepancy that exists between the two groups. When the nature of the problem has been identified, then a program for raising the esteem of the lower group in each case may be undertaken. Phillips (1969) has found that participation in school extracurricular activities is positively related to self-esteem in males. In light of this finding, a study of what activities at these two grade levels might enhance self-esteem should be undertaken, and the results of such a study used to develop a suitable activity program for the lower group.

The black child's lower evaluation of the father, teacher, and friends, his lower identification with these significant others, and his lower social interest at all grade levels suggest a kind of alienation that must be overcome in order to integrate him more effectively into the educational process. Here again is needed a diagnostic analysis of the factors that have contributed to the development of the more negative attitudes toward these persons. What are the interactions with these significant others that differentiate the two groups? What interactions conducive to higher esteem for and closer identification with these persons can be instigated in the school setting? These are questions whose answers may suggest a positive program designed to reduce the "identification gap" between the black child and these significant others.

A similar analysis should be made of the factors underlying the relative low esteem for the teacher and lack of identification with this person, shown by all of the subgroups. The identification with the teacher should be almost as great as that with the parents, and the esteem for the teacher should approximate that of the parents since the teacher functions as a parent surrogate. Situations and experiences leading to more positive attitudes toward the teacher at all grade levels must be discovered and incorporated in the educational program.

A careful scrutiny of the total physiological-social-educational situation confronting the female student at the sixth and ninth grades should be made to determine the factors that are responsible for the striking drop in identification with teacher at the sixth grade and the drop in self-esteem at the ninth grade. The findings of such a study should then be utilized to plan programs or design situations that will boost female self-esteem and identification with the teacher at these apparently critical periods.

The Abasement-Succorance-Aggression need pattern observed in students at the three higher grade levels implies that these students are functioning under considerable psychological stress. The need for aggression conflicts with needs for support and atonement. There is little that the school system can do immediately and directly to develop a more constructive and less conflictive need structure, as this pattern results from many cultural determinants outside of the jurisdiction of the school. A long range enterprise, however, might involve a study of community forces that have shaped the need-structure into this pattern.

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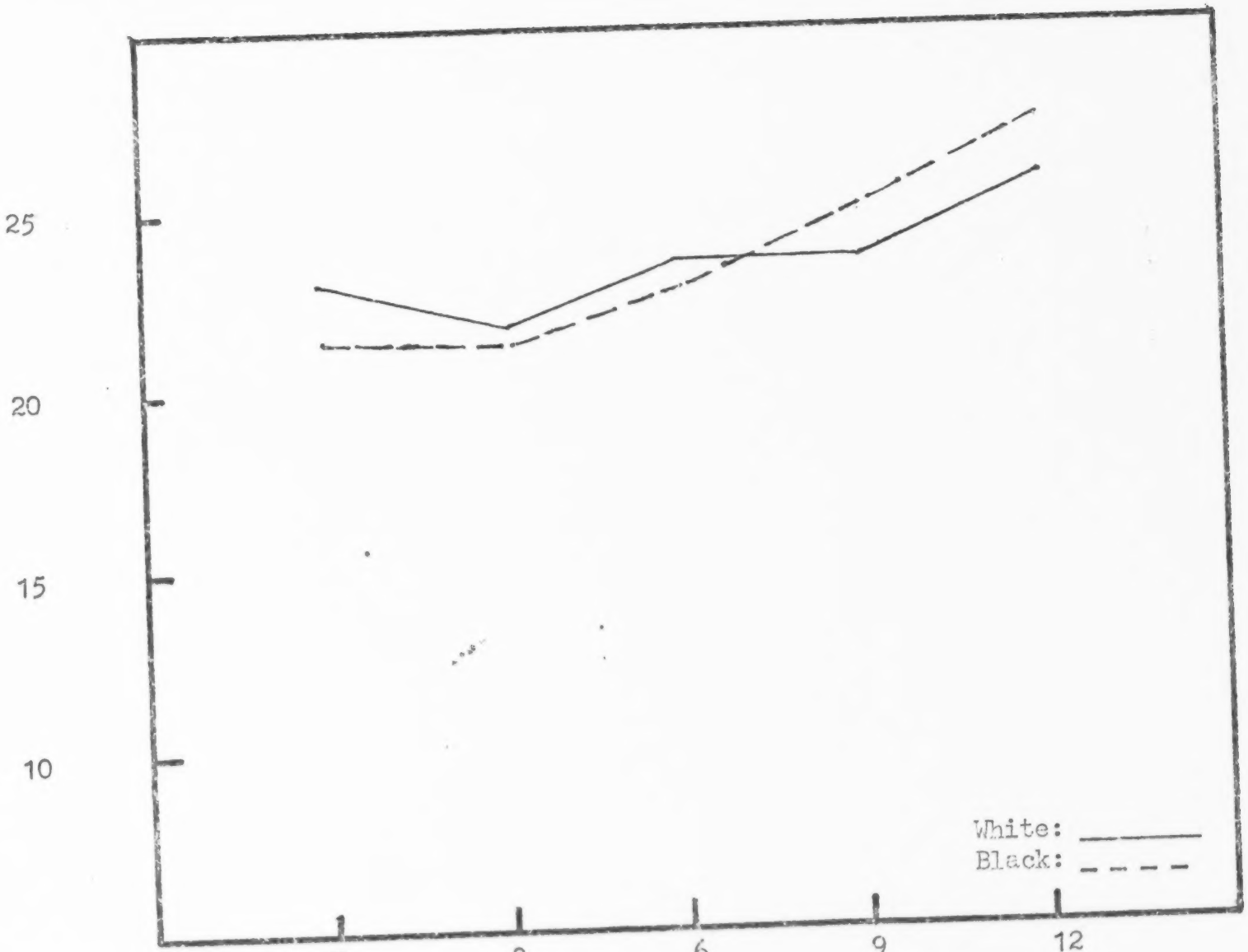
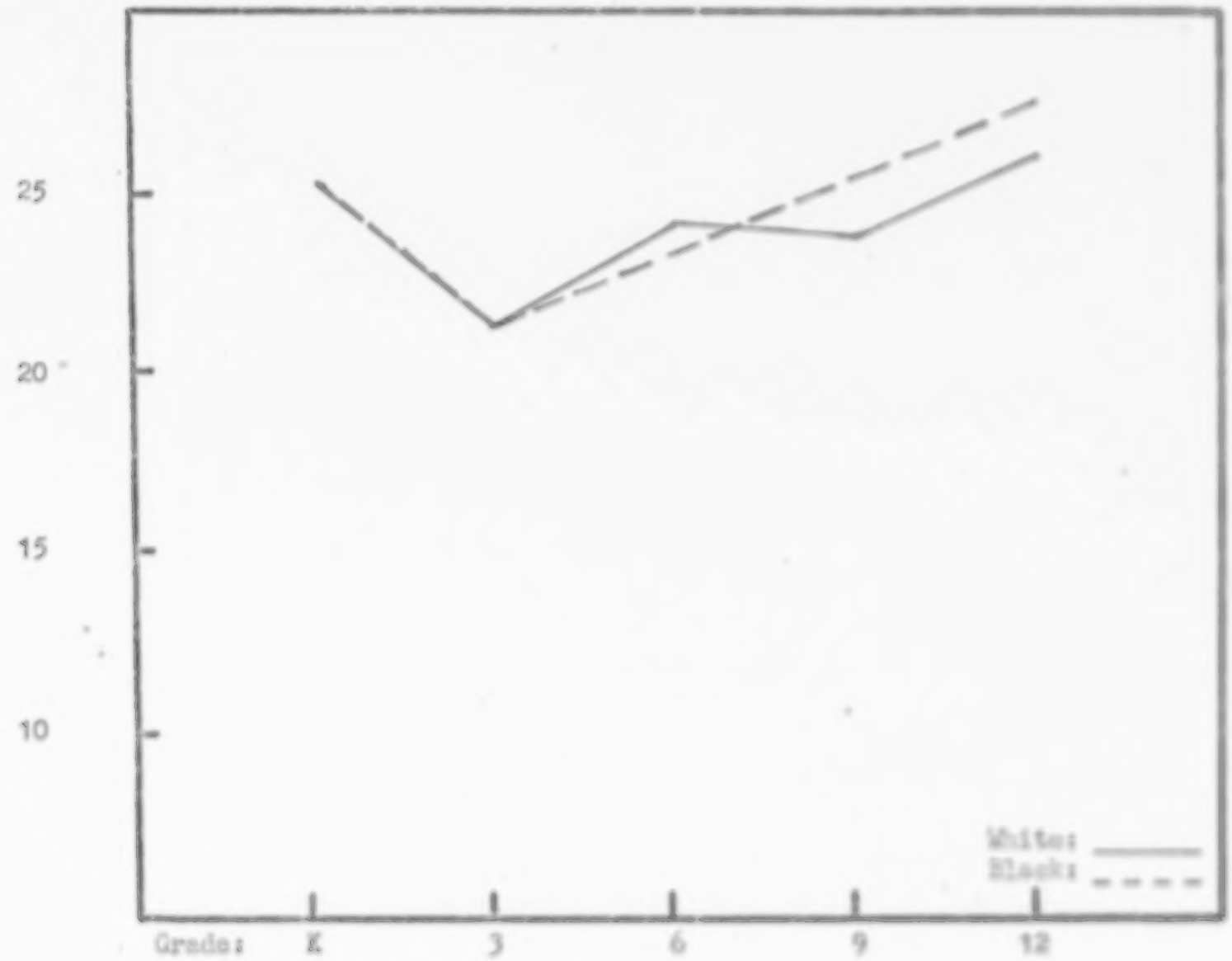


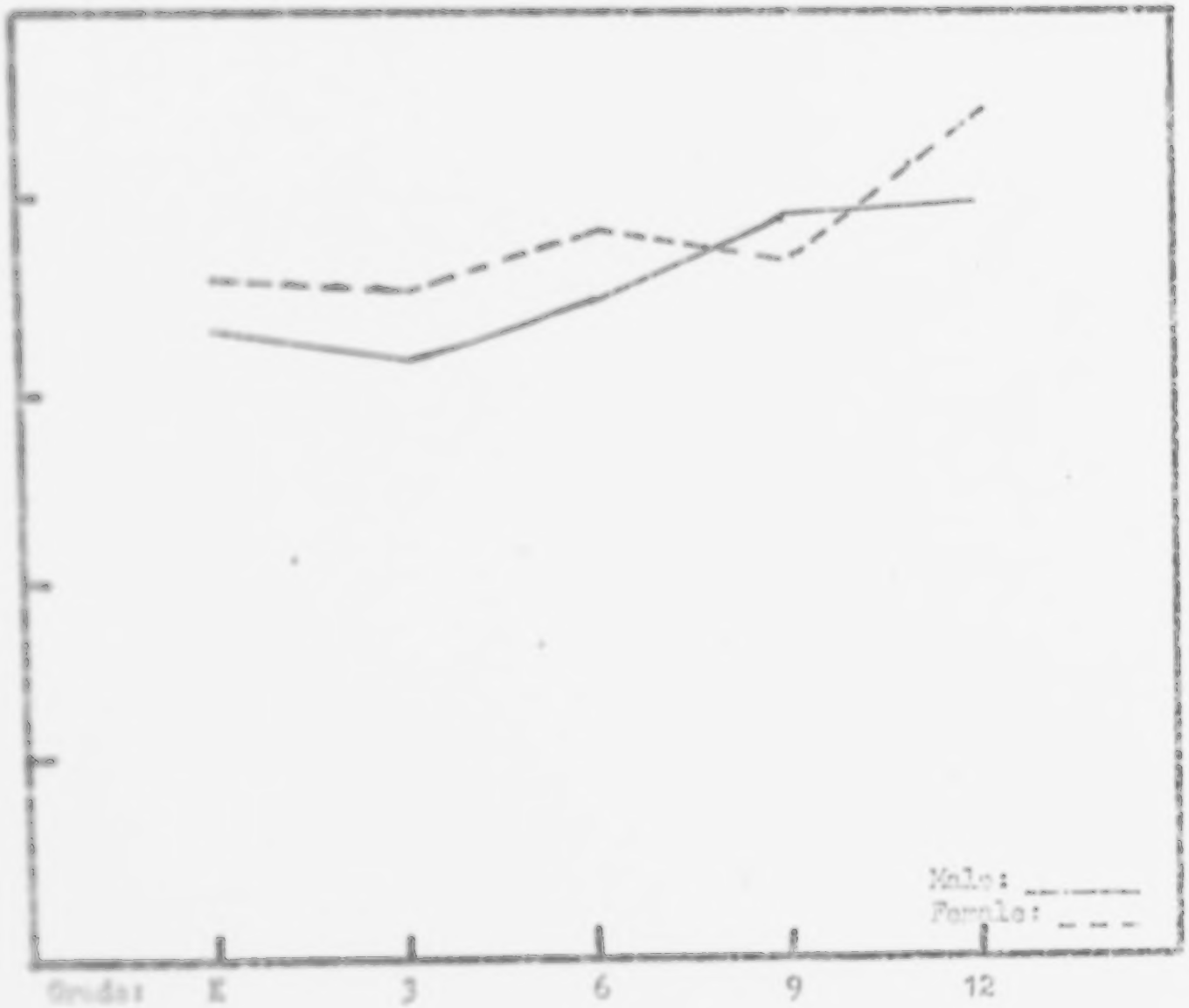
	K	3	6	9	12
White Mean:	23.0	21.7	23.4	23.5	25.6
Black Mean:	21.3	21.3	22.8	24.8	27.3
	p=.01	NS	NS	NS	p=.05

Figure 1. Horizontal Esteem: Black - White Comparison



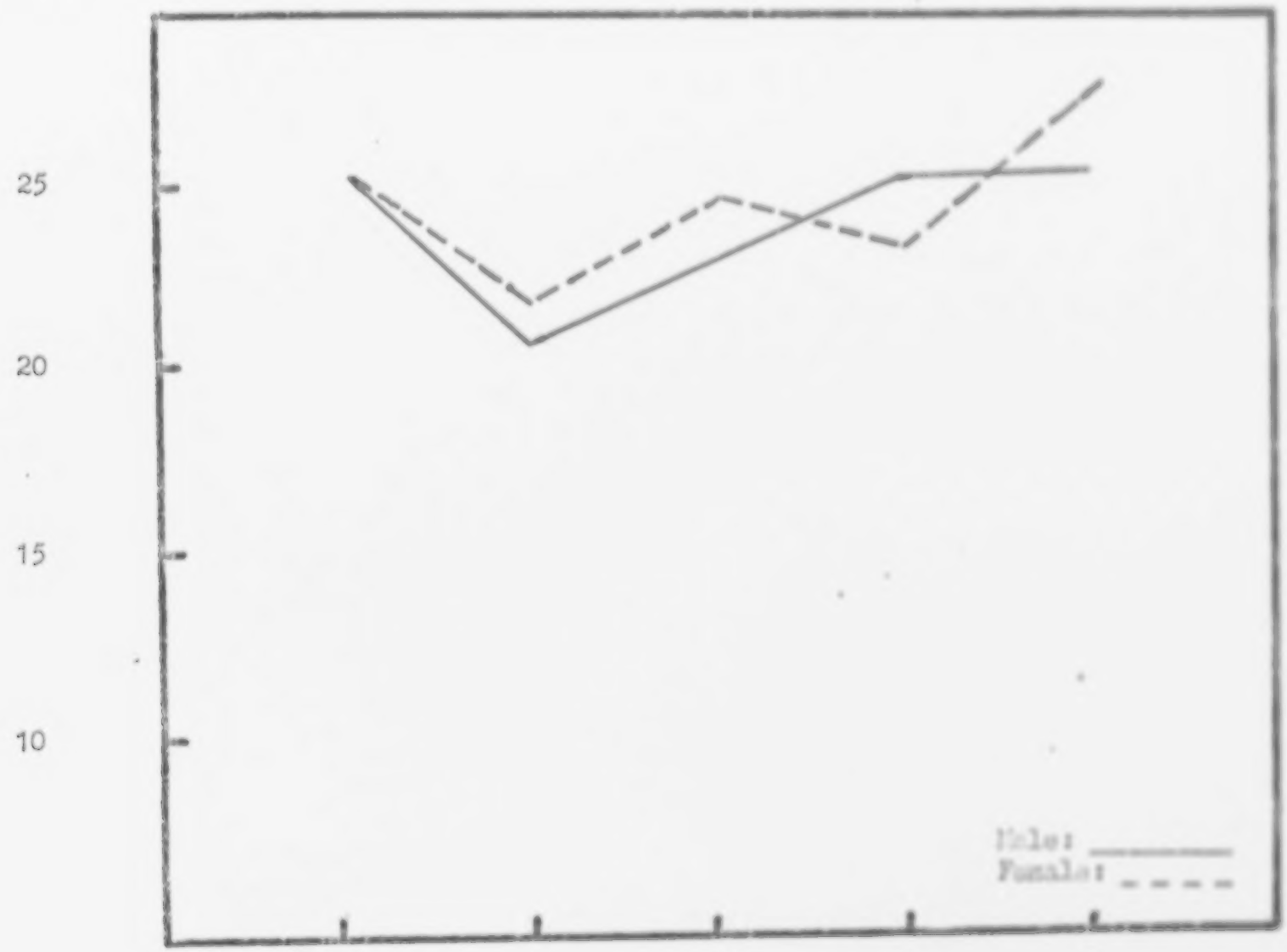
	K	3	6	9	12
White Mean:	25.4	21.4	24.1	24.0	26.1
Black Mean:	25.4	21.4	23.6	25.3	27.4
	15	13	15	18	13

Figure 2. Vertical Esteem: Black - White Comparison



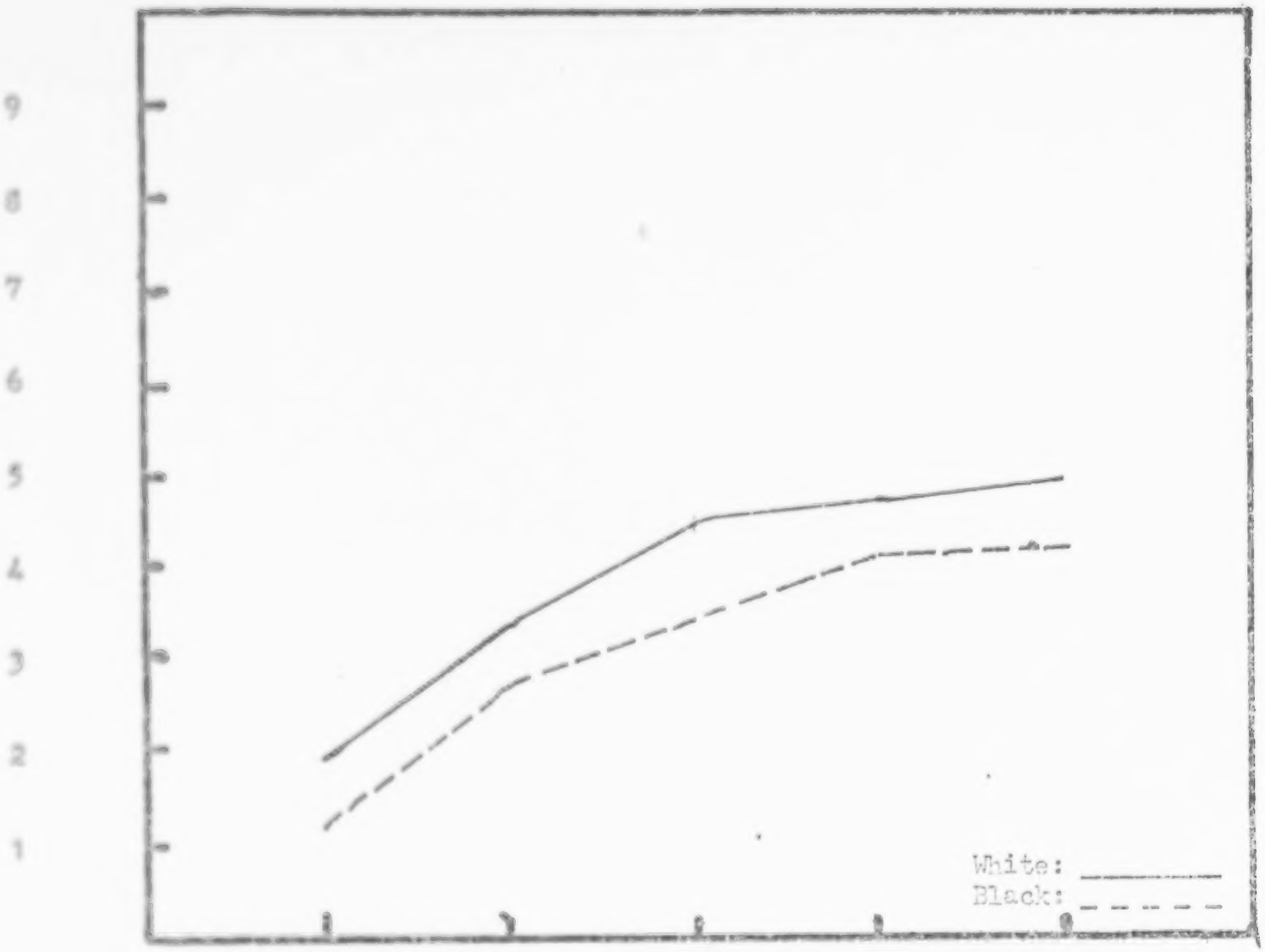
	K	3	6	9	12
Male Mean:	21.5	20.7	22.4	24.4	27.8
Female Mean:	22.9	22.6	24.1	23.2	27.2
	p=.05	p=.01	p=.3	p=.05	p=.01

Figure 3. Horizontal Extent: Male - Female Comparison



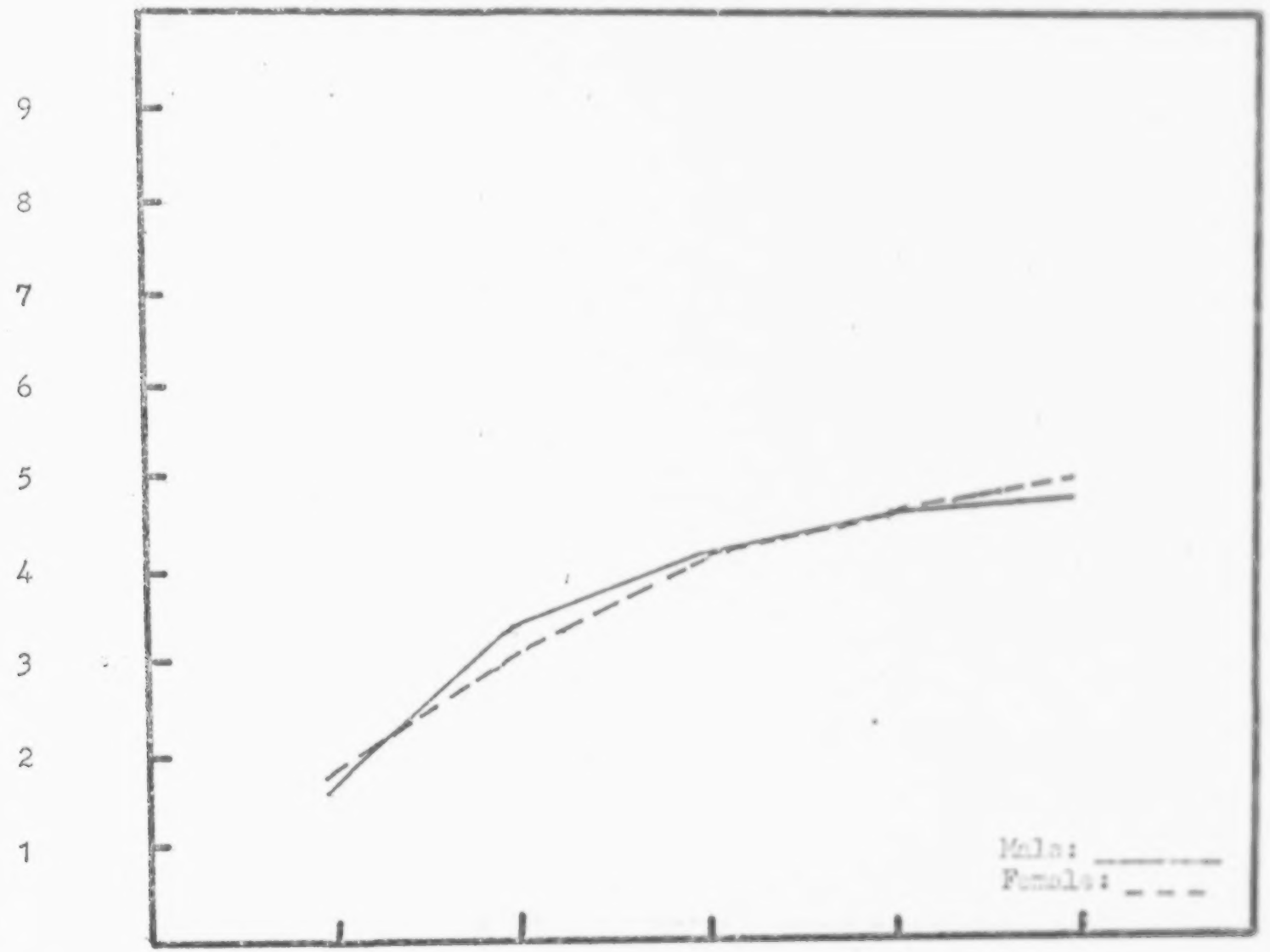
Grade :	K	3	6	9	12
Male Mean:	25.5	20.9	23.3	25.2	25.4
Female Mean:	25.3	21.8	24.8	23.4	27.4
	NS	NS	p=.01	p=.01	p=.01

Figure 4. Vertical Esteem: Male - Female Comparison



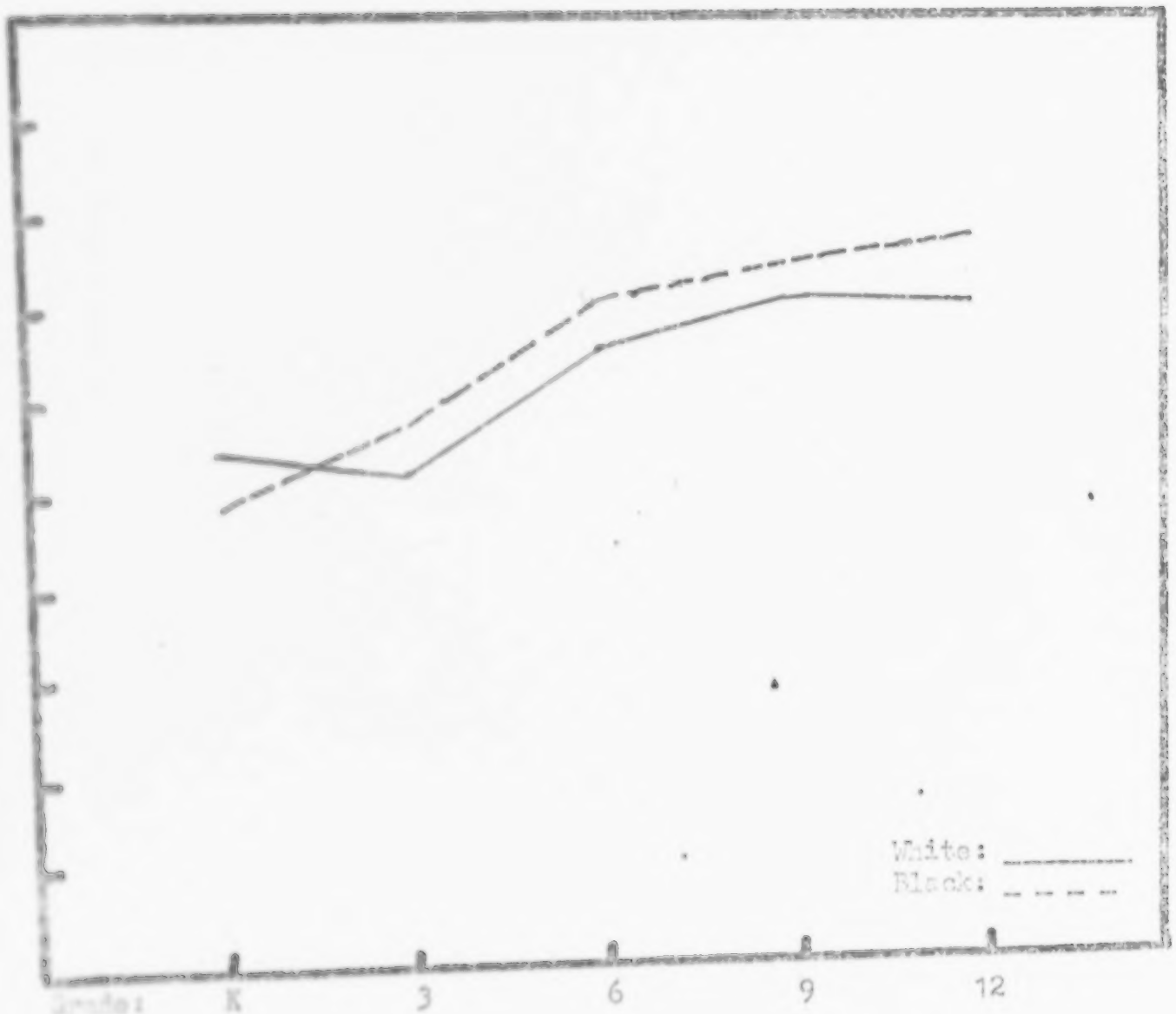
Grade:	K	3	6	9	12
White Mean:	1.9	3.4	4.5	4.7	5.0
Black Mean:	1.1	2.7	3.4	4.1	4.2
	z=5.0 p=.01	z=3.4 p=.01	p=.01	p=.01	p=.01

Figure 5. Dependency: Black - White Comparison



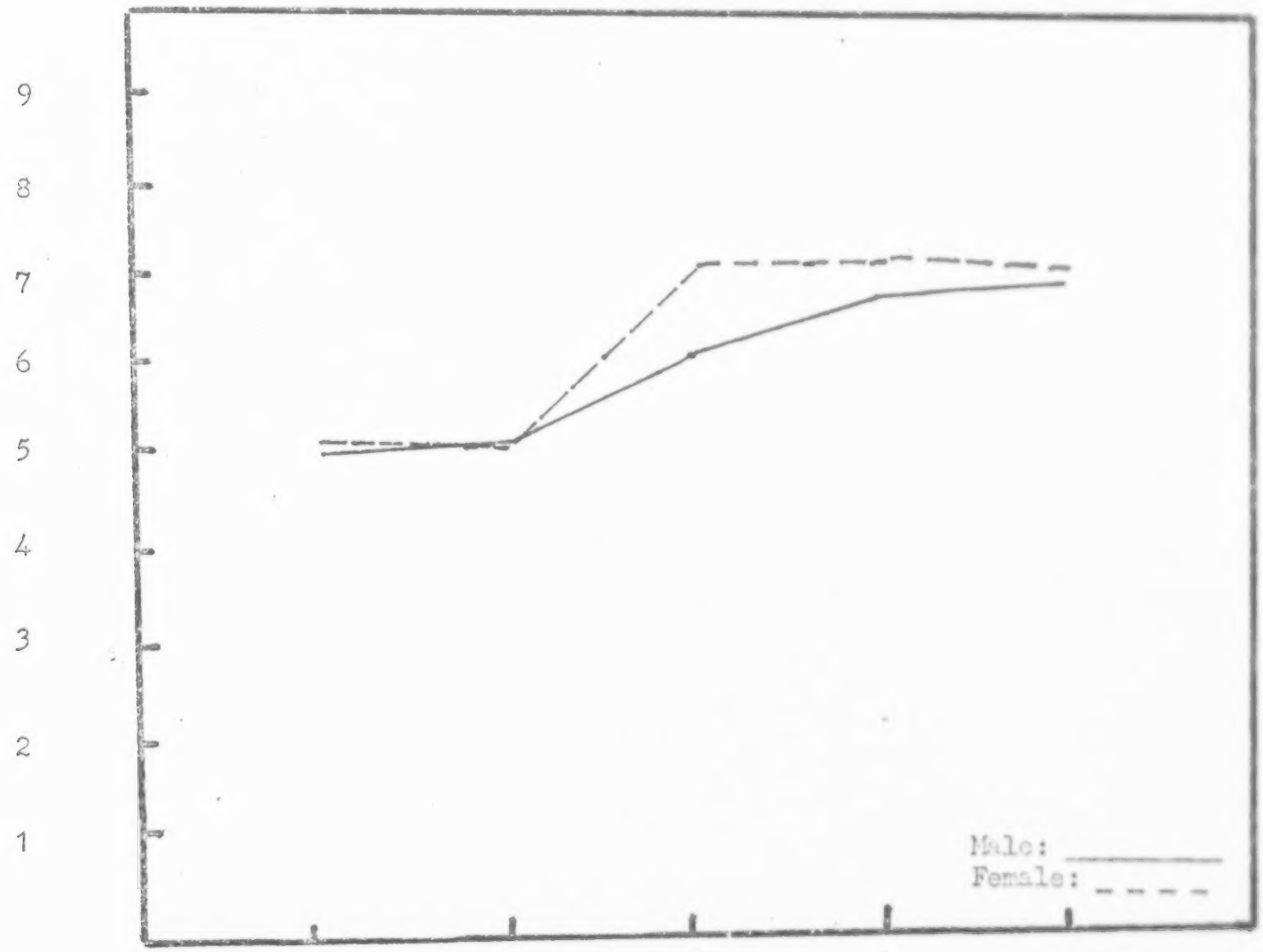
Grade:	K	3	6	9	12
Male Mean:	1.6	3.3	4.2	4.6	4.7
Female Mean:	1.8	3.1	4.1	4.5	4.9
	NS	NS	NS	NS	NS

Figure 6. Dependency: Male - Female Comparison



	K	3	6	9	12
White Means	5.4	5.2	6.5	6.9	6.8
Black Means	4.9	5.7	6.9	7.3	7.6
	z=3.2 p=.01	z=2.4 p=.05	z=2.0 p=.05	NS	z=2.3 p=.05

Figure 7. Individuation: Black - White Comparison



Grade:	K	3	6	9	12
Male Mean:	5.2	5.3	6.2	6.8	6.9
Female Mean:	5.3	5.3	7.0	7.2	7.1
			z=4.1 p=.01	NS	NS

Figure 8. Individuation: Male - Female Comparison

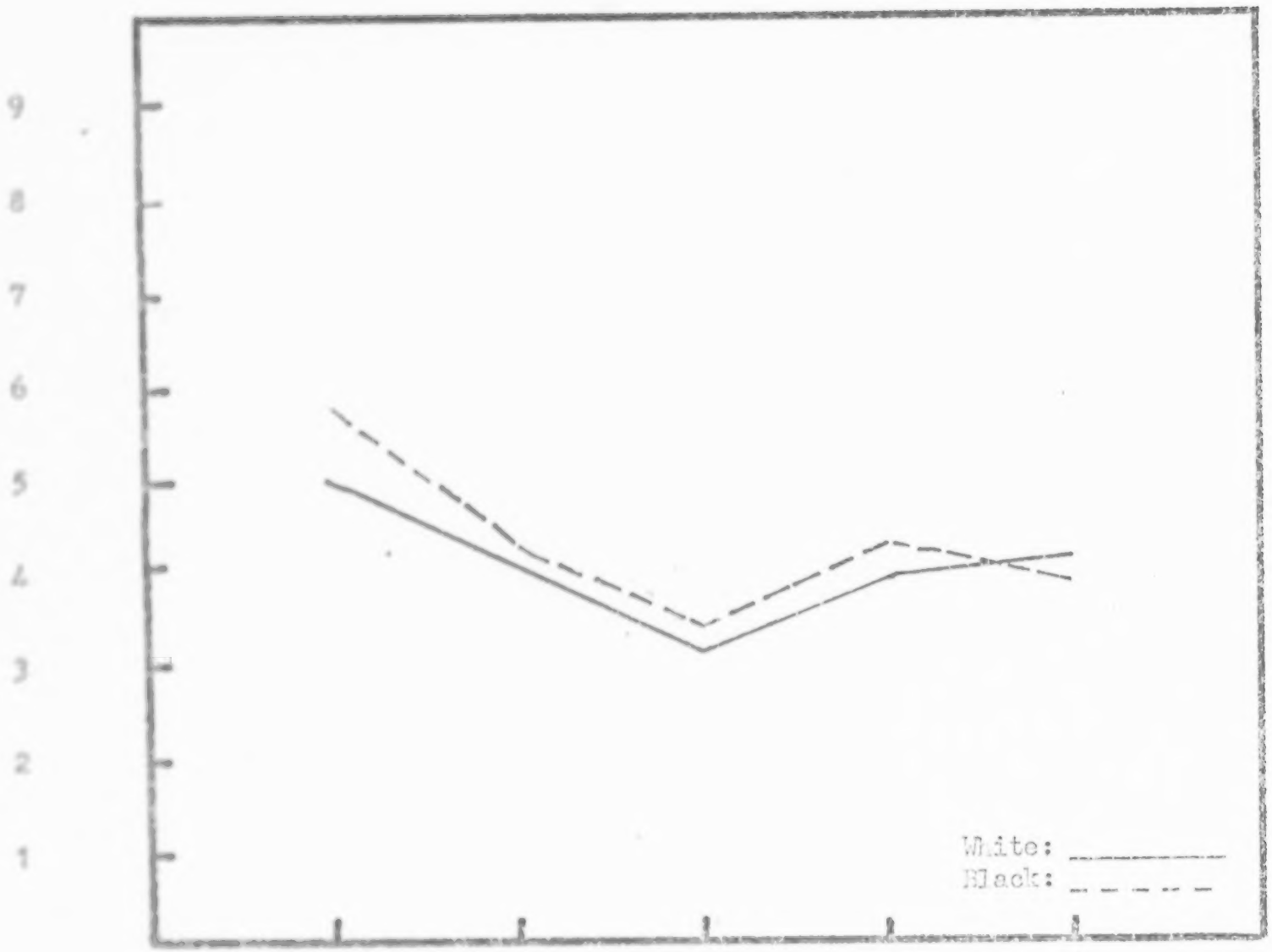
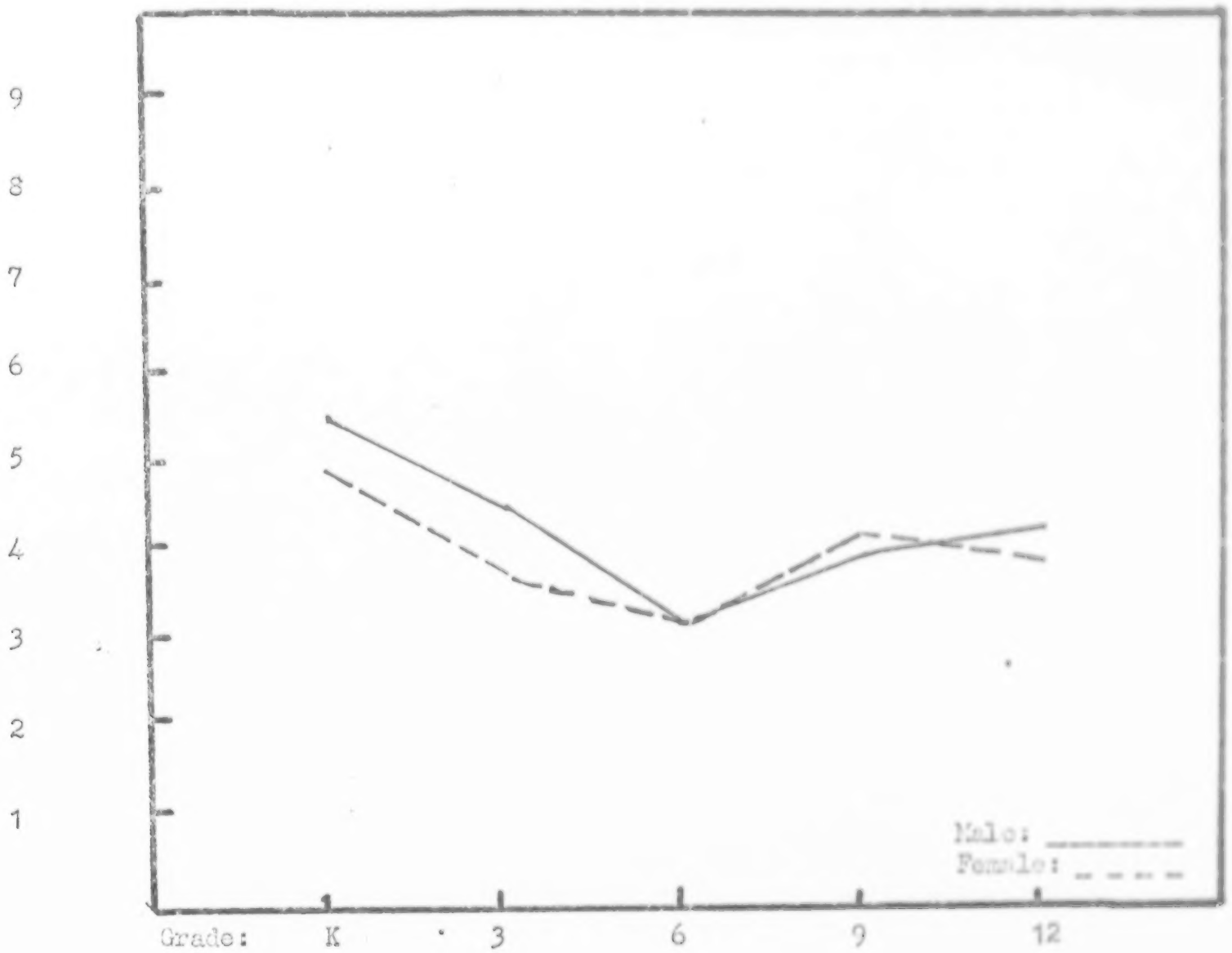
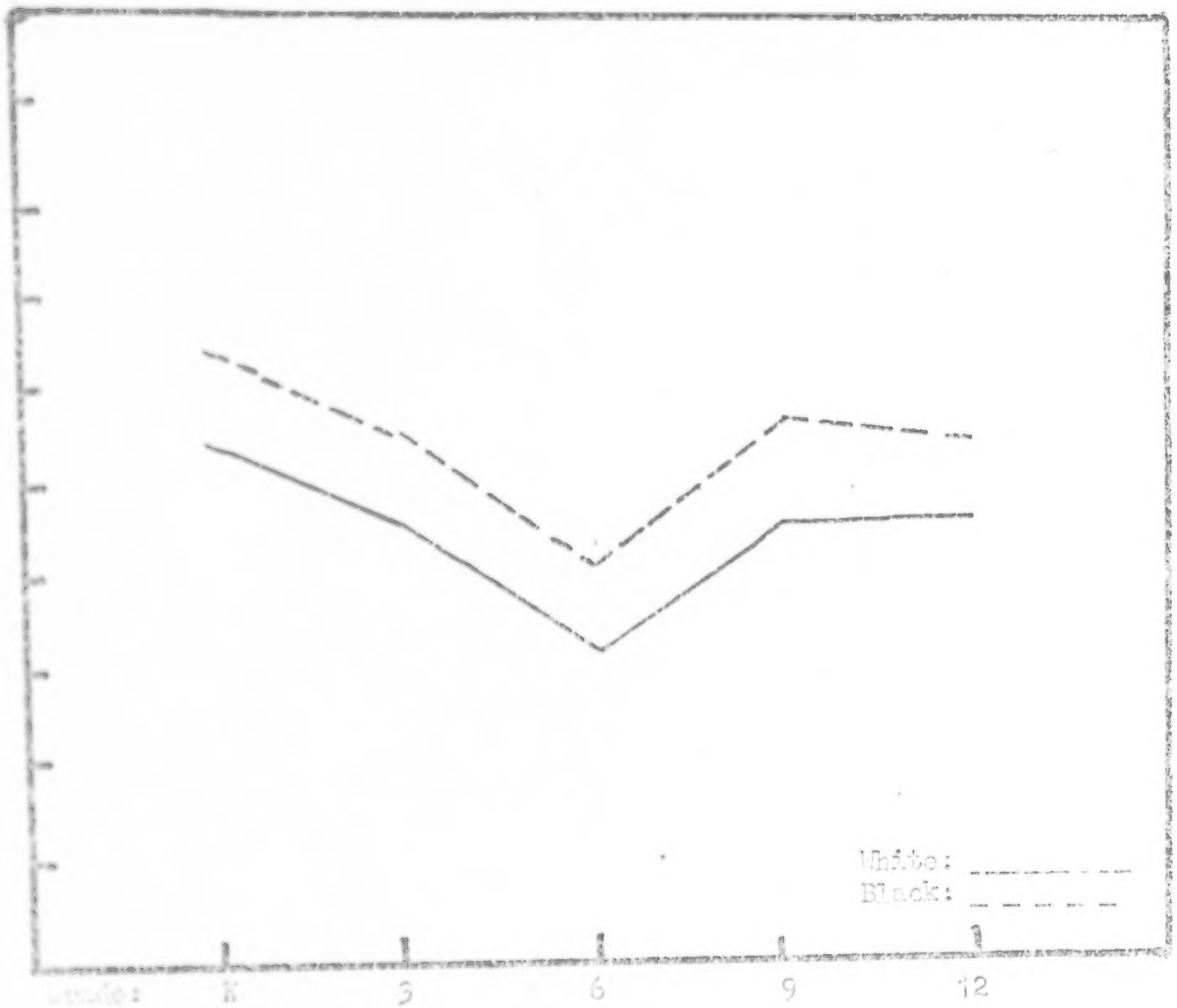


Figure 9. Identification With Father: Black - White Comparison



	K	3	6	9	12
Male Mean:	5.5	4.5	3.2	3.9	4.2
Female Mean:	5.0	3.8	3.2	4.1	3.8
	NS	z=2.2 p=.05	NS	NS	NS

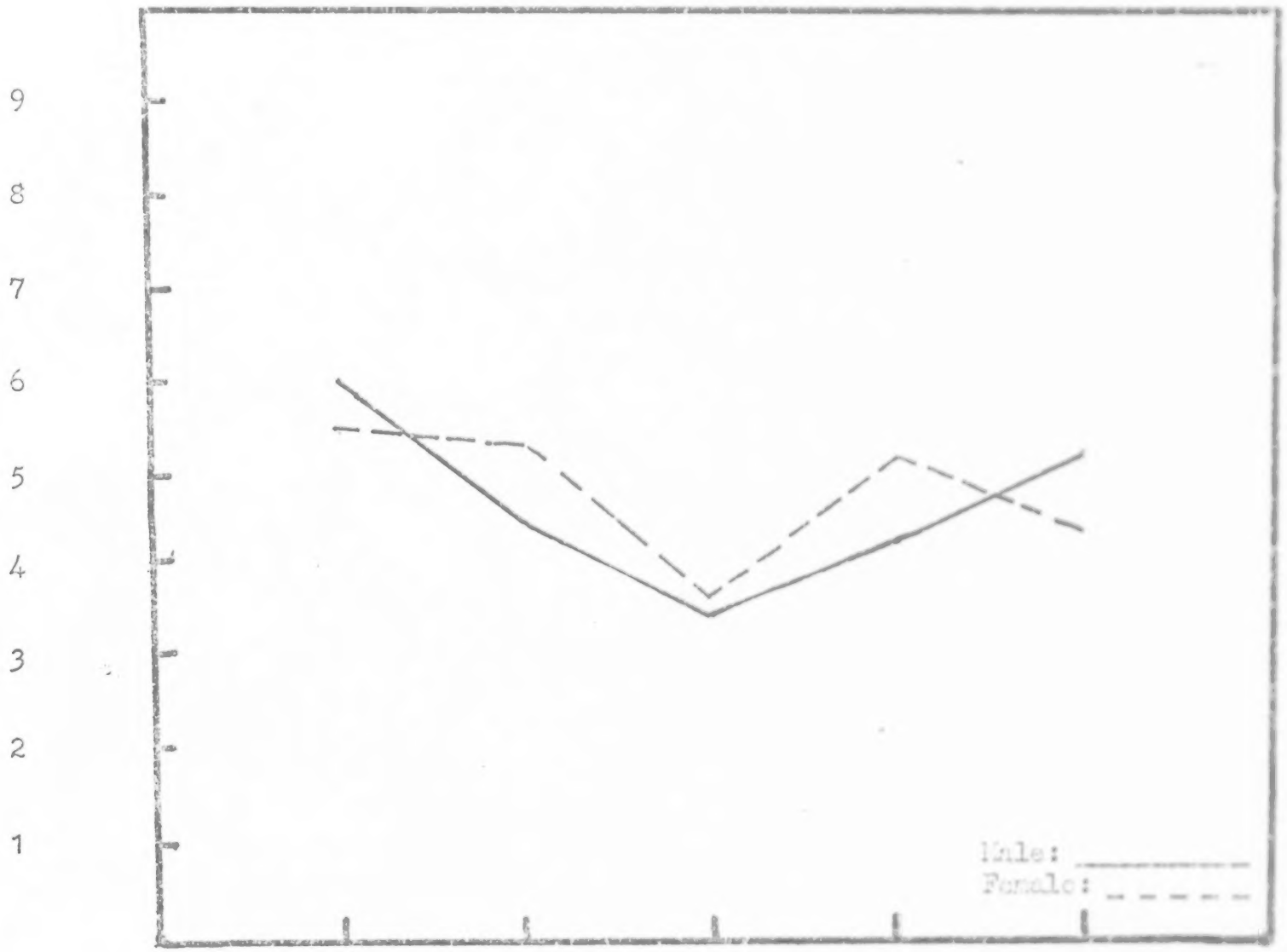
Figure 10. Identification With Mother: Male - Female Comparison



	K	3	6	9	12
White Mean:	5.5	4.6	3.4	4.5	4.6
Black Mean:	6.4	5.6	4.2	5.6	5.4

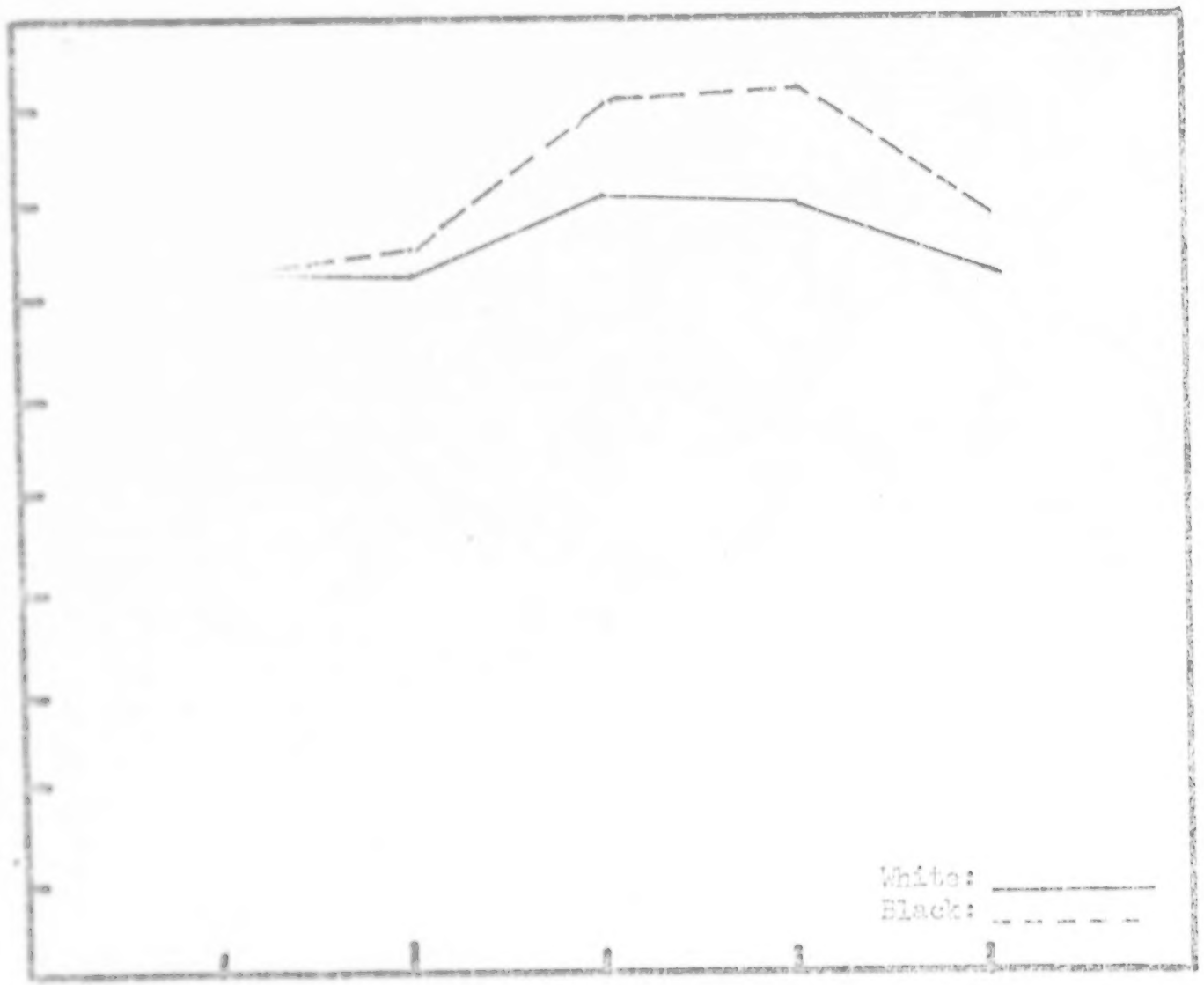
z=2.7 p=.01 z=5.4 p=.01 z=2.7 p=.05 z=2.5 p=.05 NS z=1.5

Figure 1°. Identification With Father: White - Black Comparison



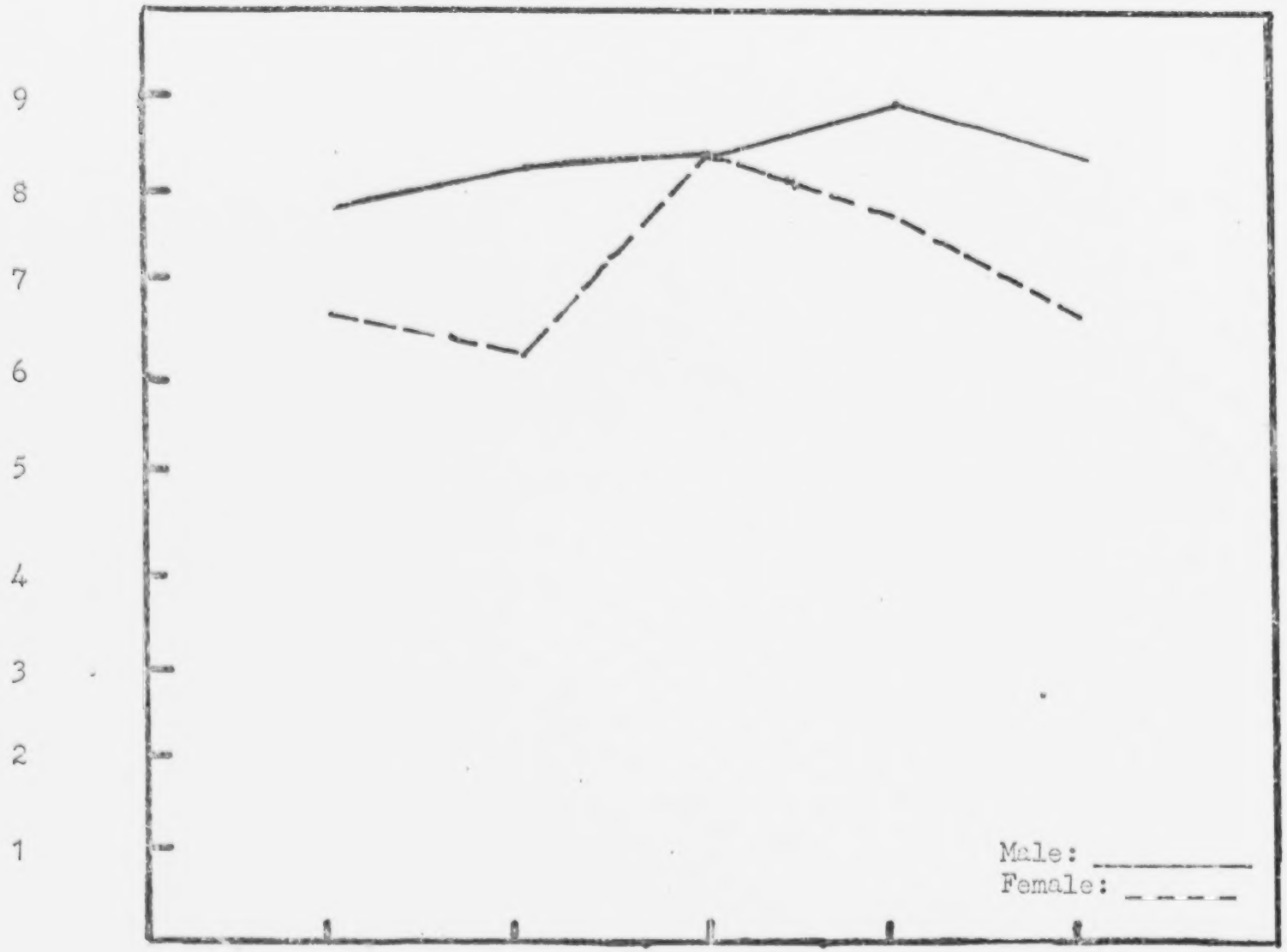
Grade:	K	3	6	9	12
Male Mean:	5.9	4.5	3.5	4.3	5.2
Female Mean:	5.5	5.3	3.7	5.2	4.4
	NS	z=2.2 p=.05	NS	z=2.8 p=.01	z=2.0 p=.05

Figure 12. Identification With Father: Male - Female Comparison



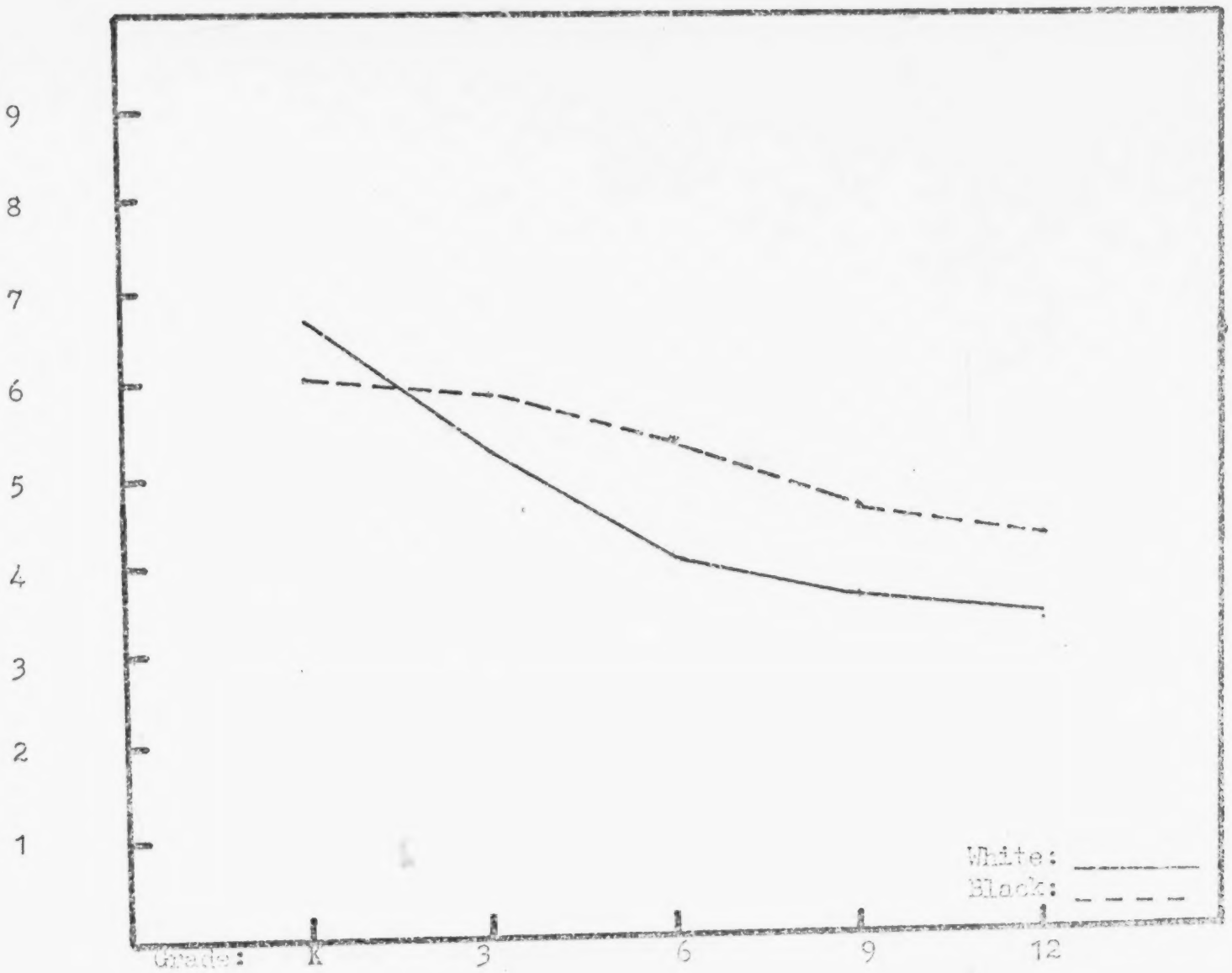
	K	3	6	9	12
White Mean:	7.3	7.3	8.1	8.0	7.3
Black Mean:	7.3	7.5	9.2	9.2	7.8
	NS	NS	z=2.4 p=.05	z=2.7 p=.01	NS

Figure 13. Identification with Teacher: Black - White Comparison



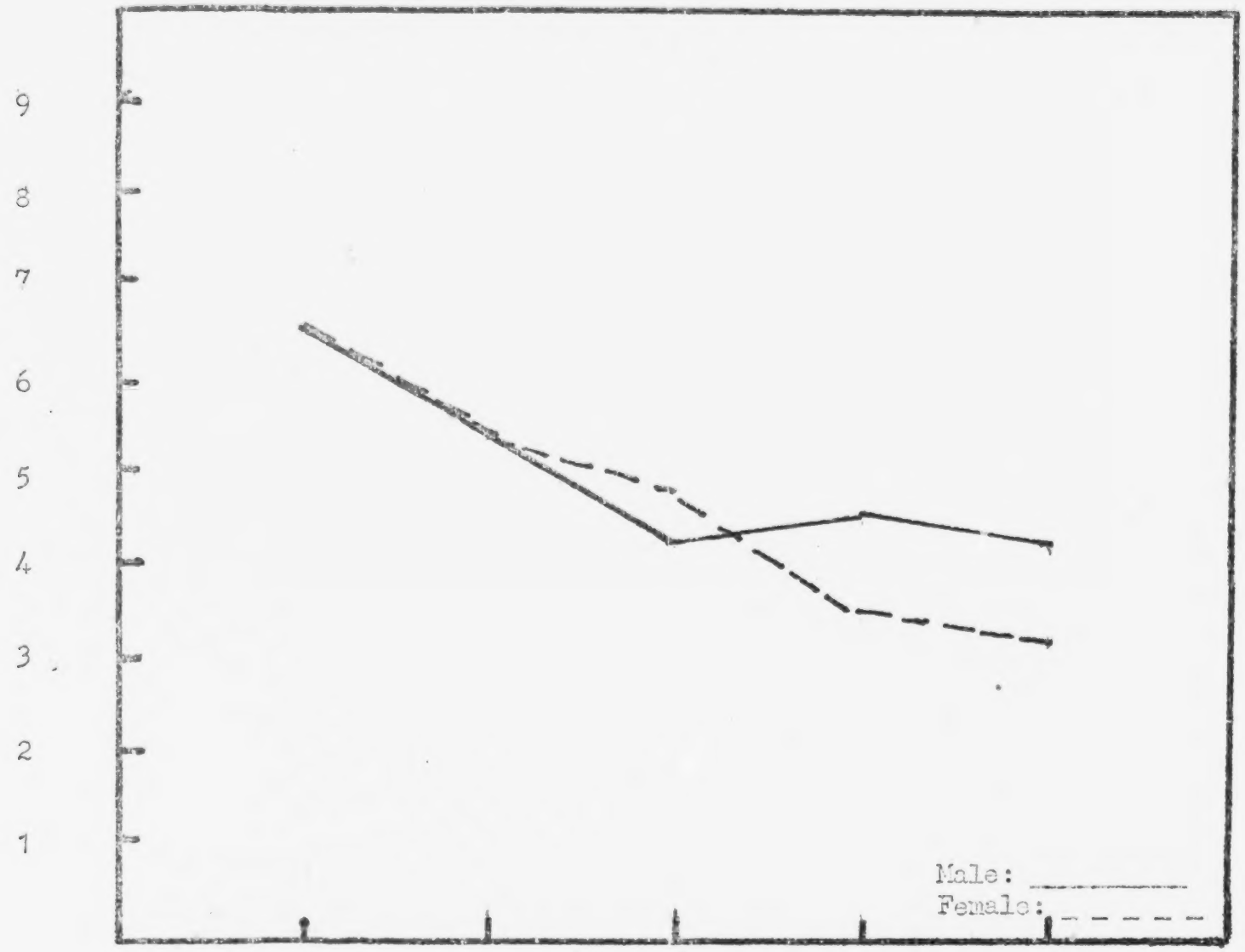
	K	3	6	9	12
Male Mean:	7.8	8.3	8.5	8.9	8.2
Female Mean:	6.8	6.3	8.4	7.7	6.6
	z=3.2 p=.01	z=5.1 p=.01	NS	z=3.3 p=.01	z=3.6 p=.01

Figure 14. Identification With Teacher: Male - Female Comparison



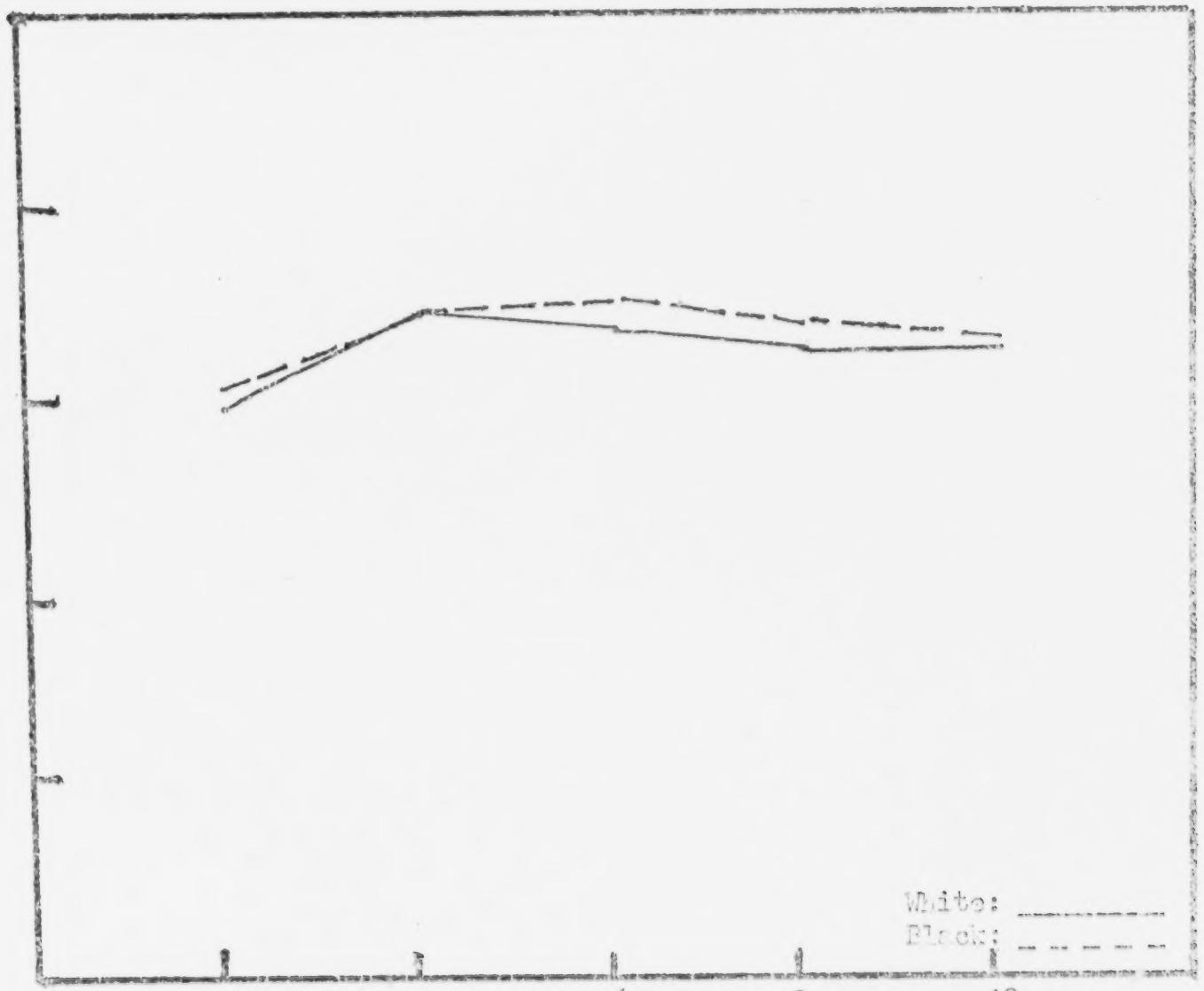
	K	3	6	9	12
White Mean:	6.6	5.2	4.1	3.7	3.4
Black Mean:	6.1	5.9	5.3	4.7	4.3
	NS	NS	z=3.8 p=.01	z=3.2 p=.01	z=2.4 p=.05

Figure 15. Identification With Friends: White - Black Comparison



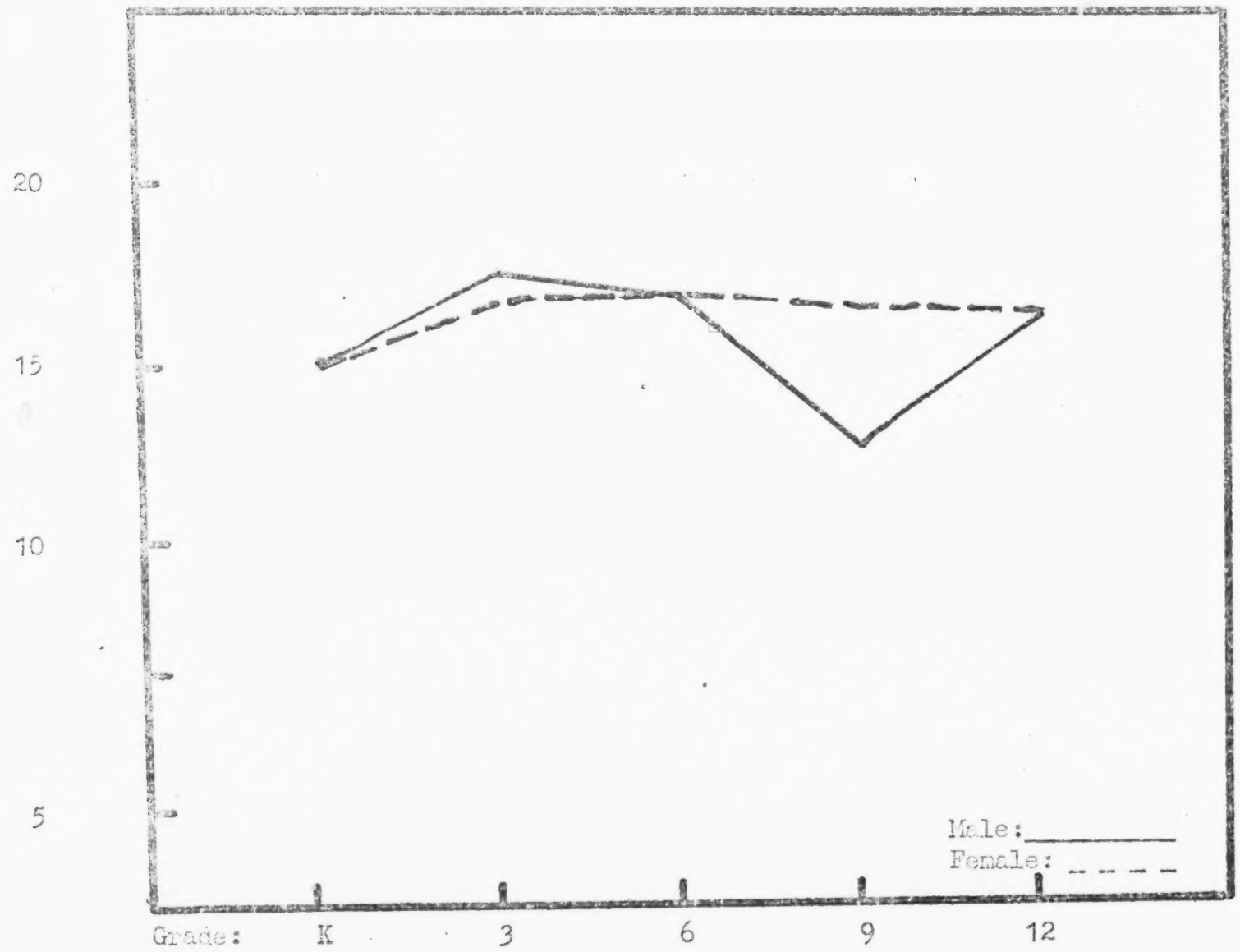
	K	3	6	9	12
Male Mean:	6.5	5.4	4.2	4.5	4.2
Female Mean:	6.5	5.4	4.8	3.5	3.1
	NS	NS	NS	z=4.0 p=.01	z=4.1 p=.01

Figure 16. Identification With Friends: Male - Female Comparison



	K	3	6	9	12
White Mean:	14.9	17.2	16.9	16.3	16.2
Black Mean:	15.3	17.2	17.4	16.9	16.5
	NS	NS	NS	SN	NS

Figure 17. Power: White - Black Comparison

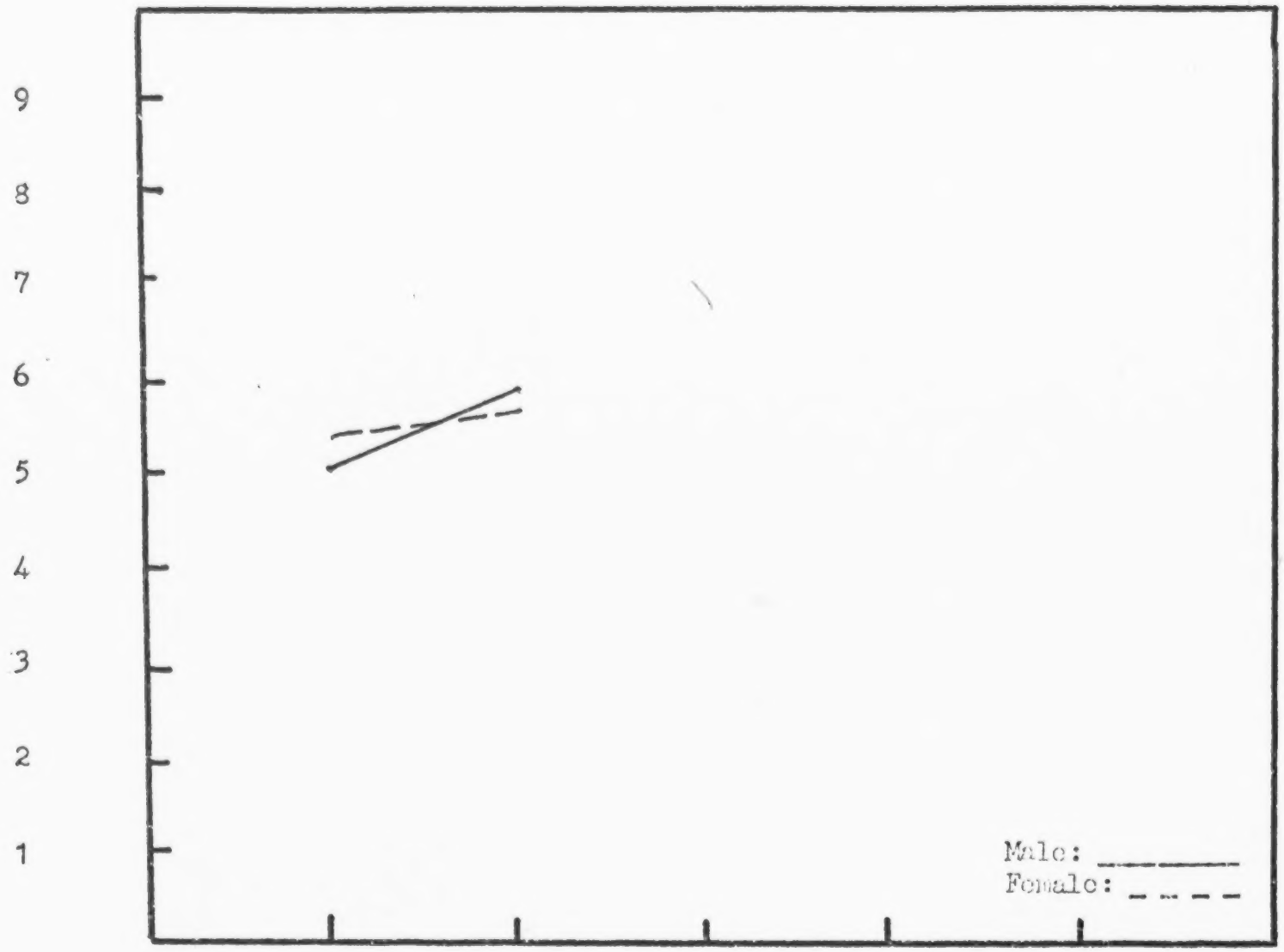


Male Mean:	15.8	17.5	17.0	12.8	16.1
Female Mean:	14.9	16.8	17.1	16.6	16.4
	NS	z=2.2 p=.05	NS	z=5.7 p=.01	NS

Figure 18. Power: Male - Female Comparison

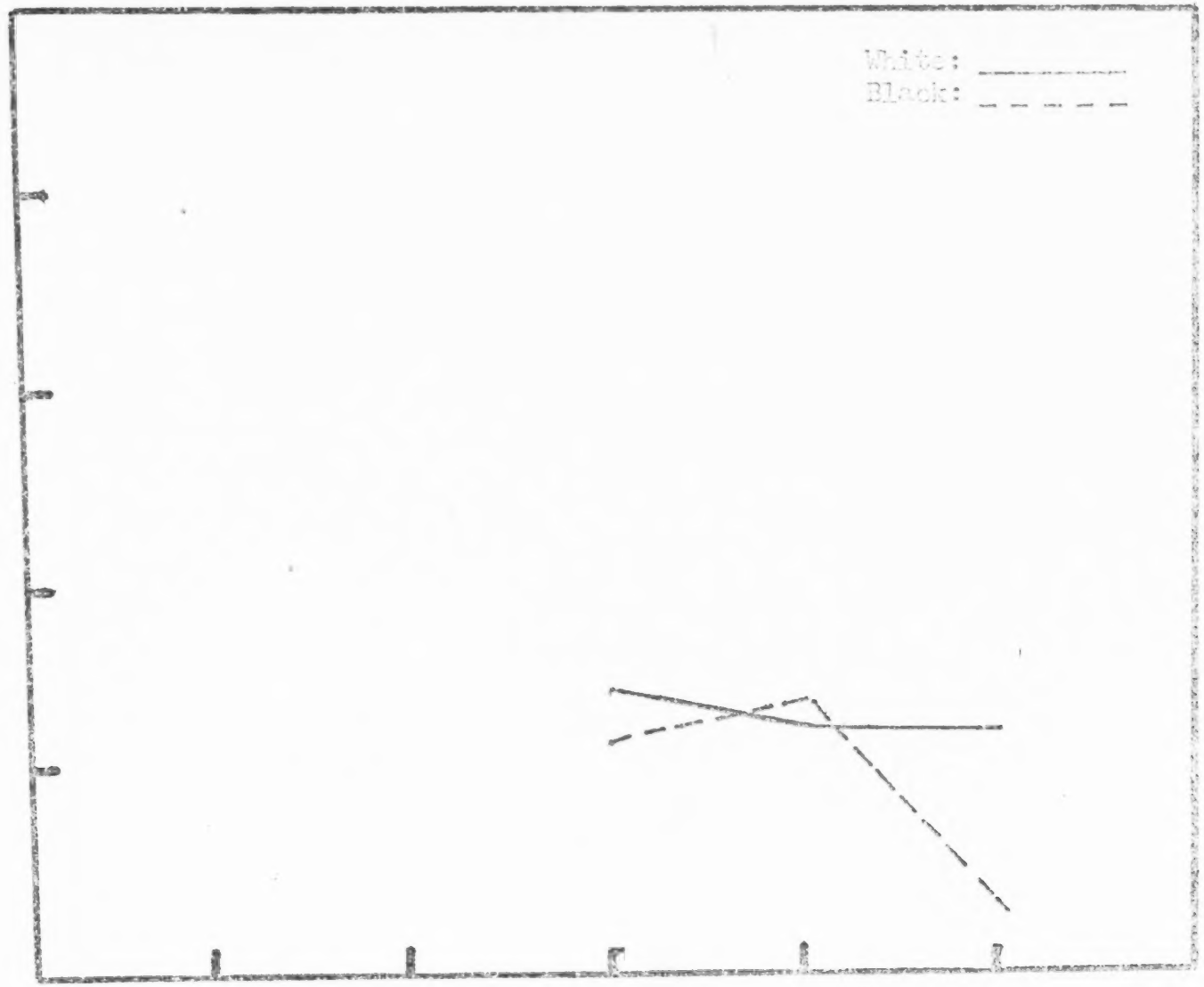
Grade:	K	3
White Mean:	5.9	5.7
Black Mean:	3.5	5.6
	z=8.1 p=.01	NS

Figure 19. Realism (color): White - Black Comparison



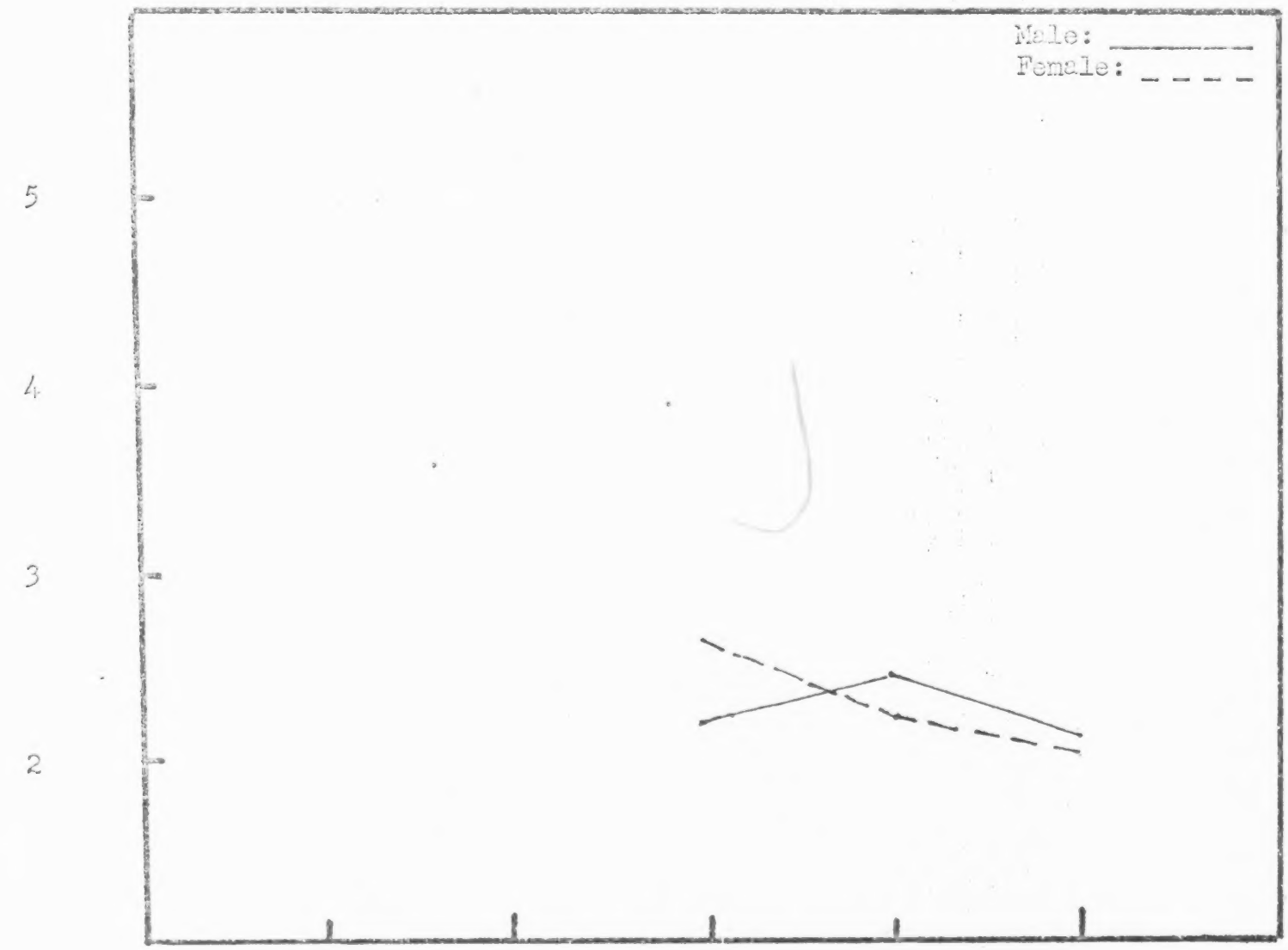
	K	3
Male Mean:	5.1	5.9
Female Mean:	5.4	5.5
	NS	NS

Figure 20. Realism (color): Male - Female Comparison



White Mean:	2.4	2.3	2.3
Black Mean:	2.2	2.4	1.3
	z=1.9 NS	NS	z=5.4 p=.01

Figure 21. Centrality: White - Black Comparison



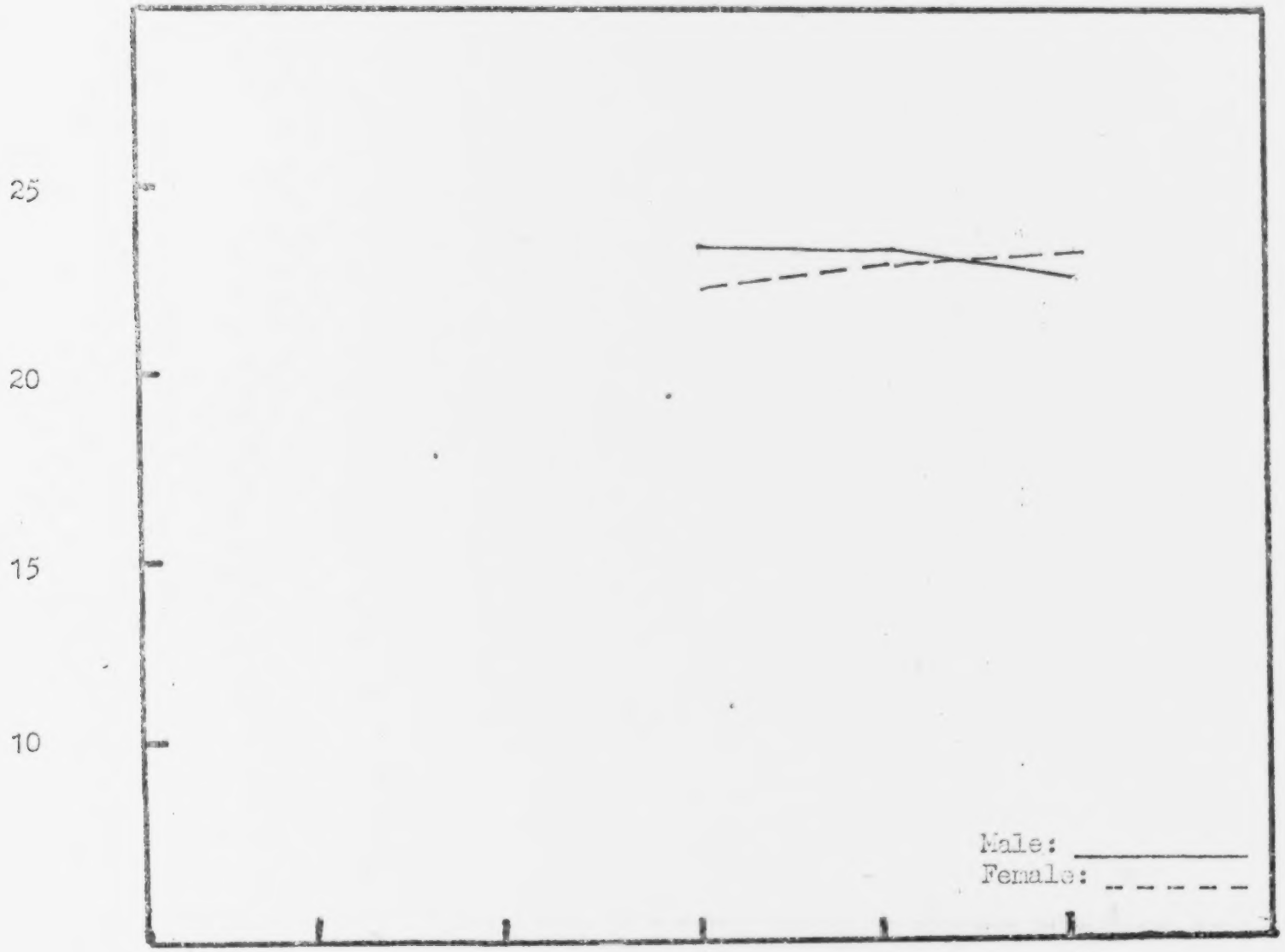
Grade:	6	9	12
Male Mean:	2.2	2.4	2.1
Female Mean:	2.6	2.2	2.0
	z=3.1 p=.01	NS	NS

Figure 22. Centrality: Male - Female Comparison

99

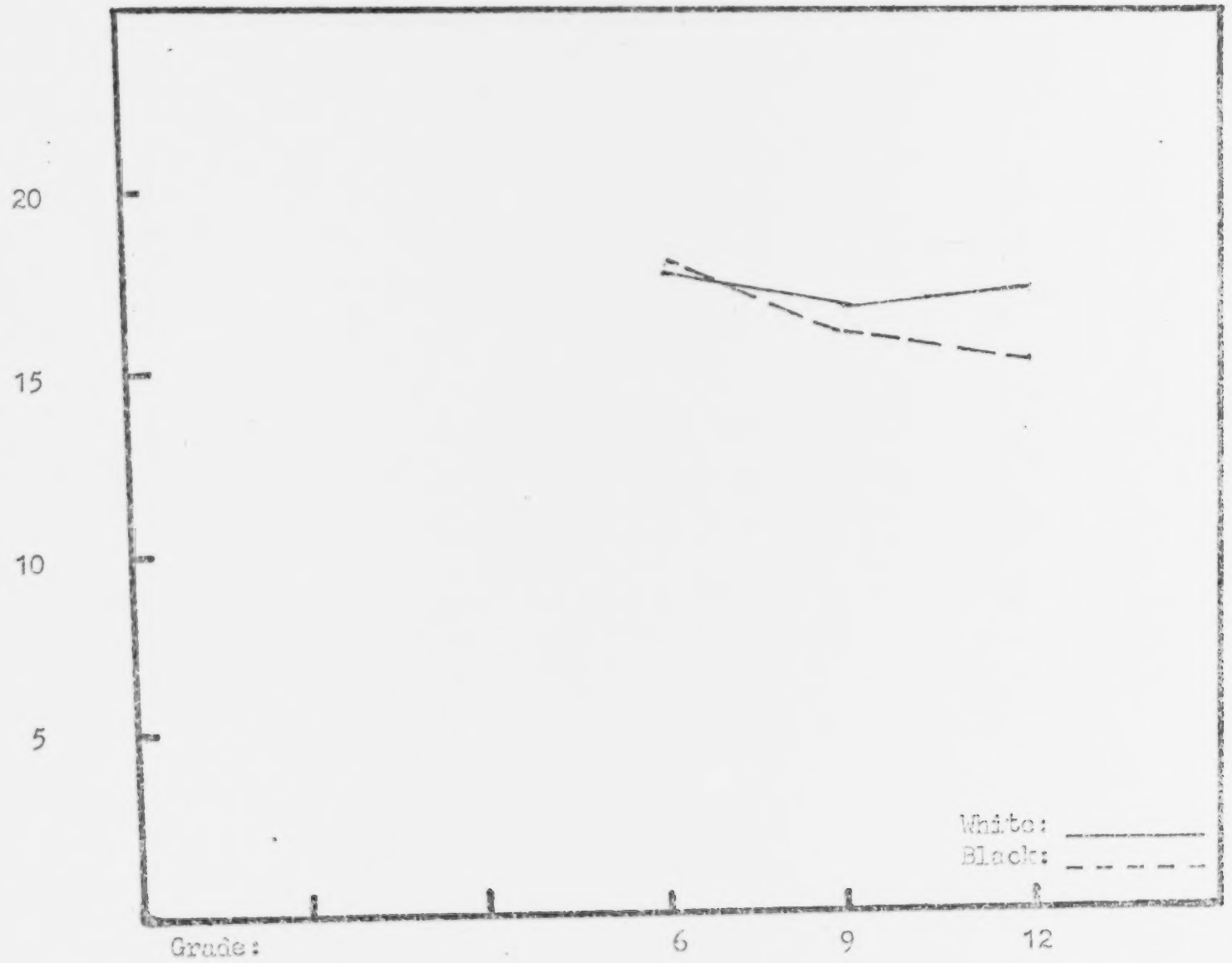
	6	9	12
White Mean:	22.9	23.2	22.9
Black Mean:	22.8	23.0	22.9
	NS	NS	NS

Figure 23. Complexity: White - Black Comparison



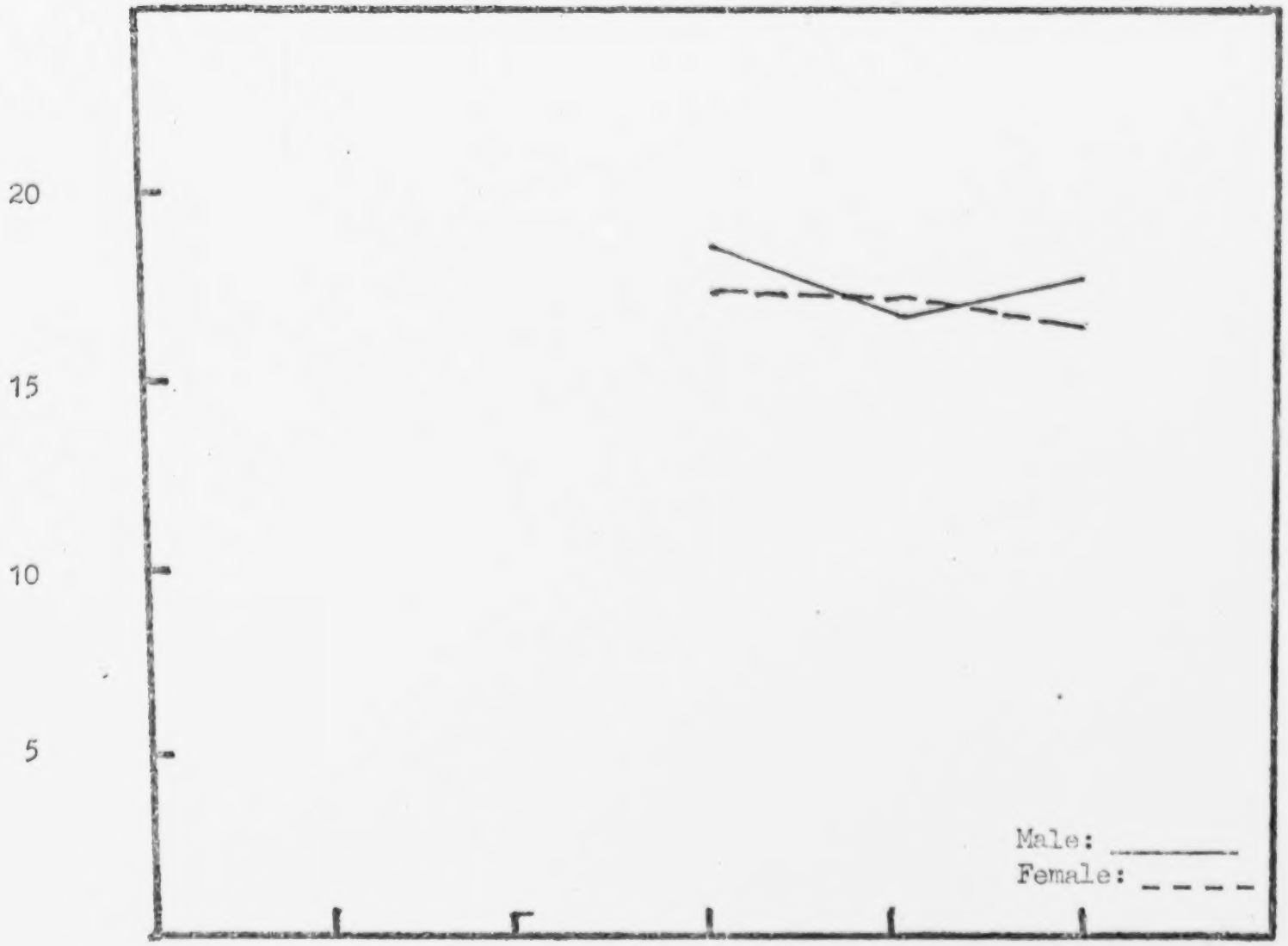
	6	9	12
Male Mean:	23.3	23.2	22.6
Female Mean:	22.4	23.1	23.3
	z=3.1 p=.01	NS	z=2.1 p=.05

Figure 24. Complexity: Male - Female Comparison



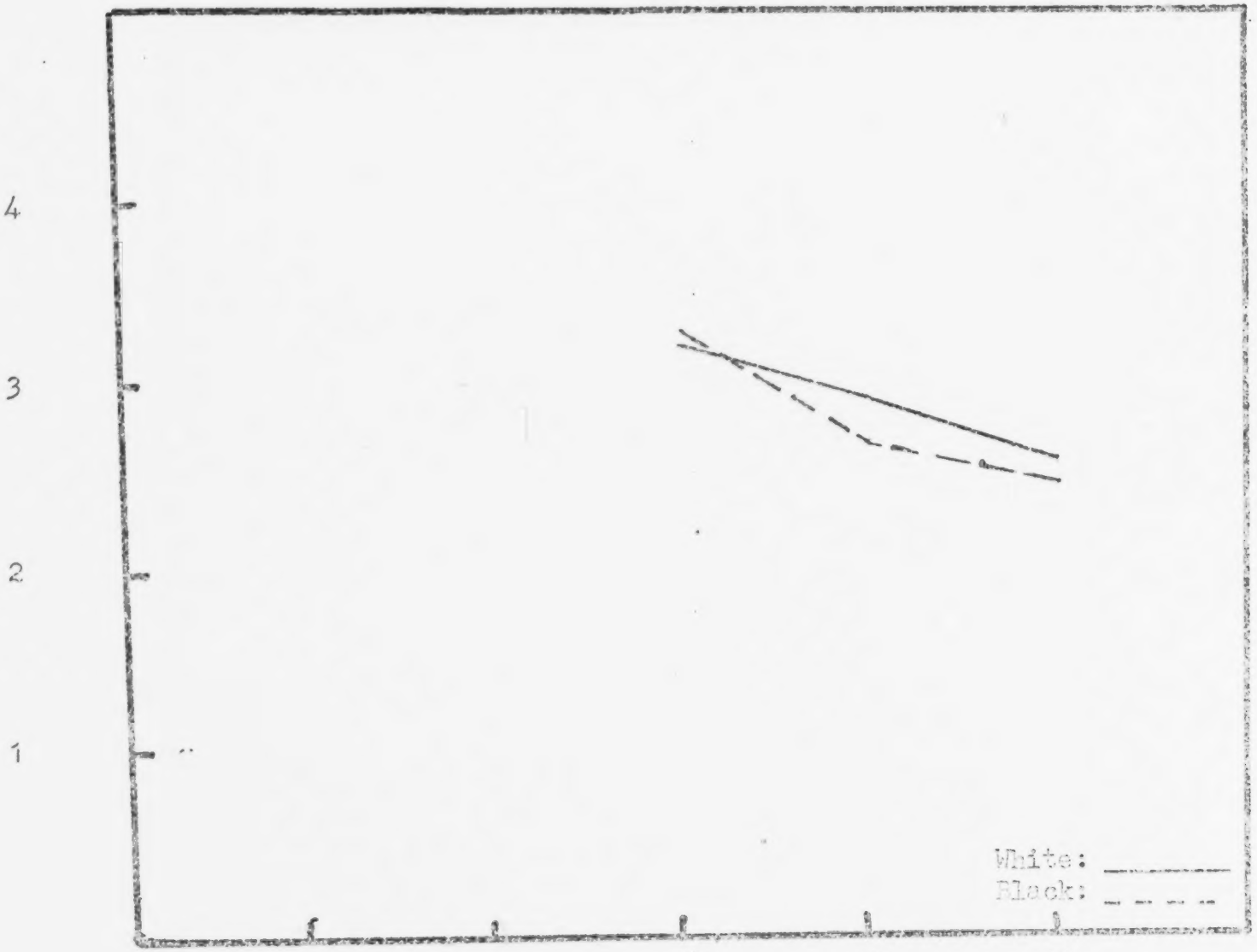
Grade:	6	9	12
White Mean:	17.7	16.7	17.2
Black Mean:	17.7	16.0	15.1
	NS	NS	z=2.8 p=.01

Figure 25. Grouping: White - Black Comparison
I



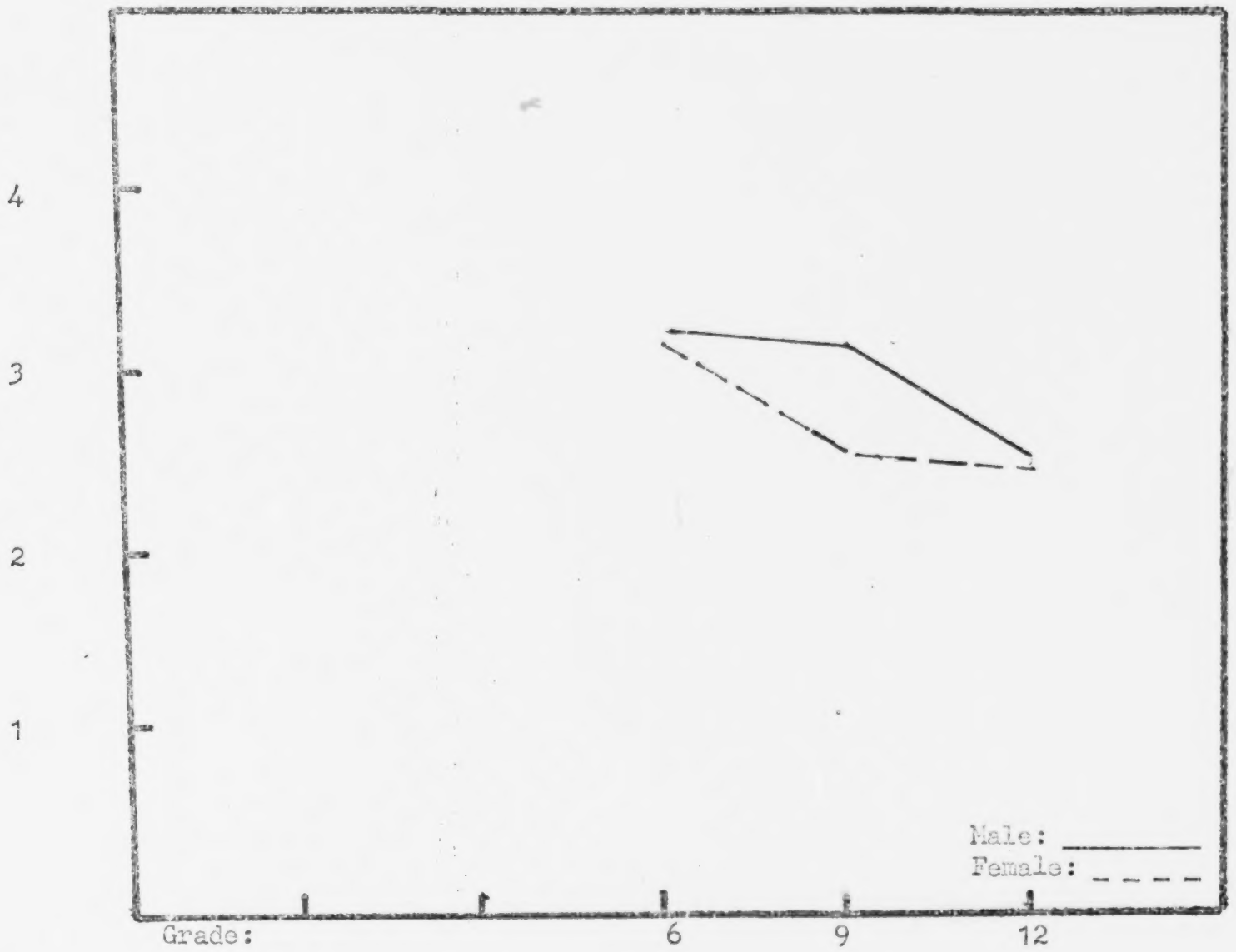
Grade:	6	9	12
Male Mean:	18.2	16.5	17.3
Female Mean:	17.1	16.5	16.1
	NS	NS	NS

Figure 26. Grouping: Male - Female Comparison
I



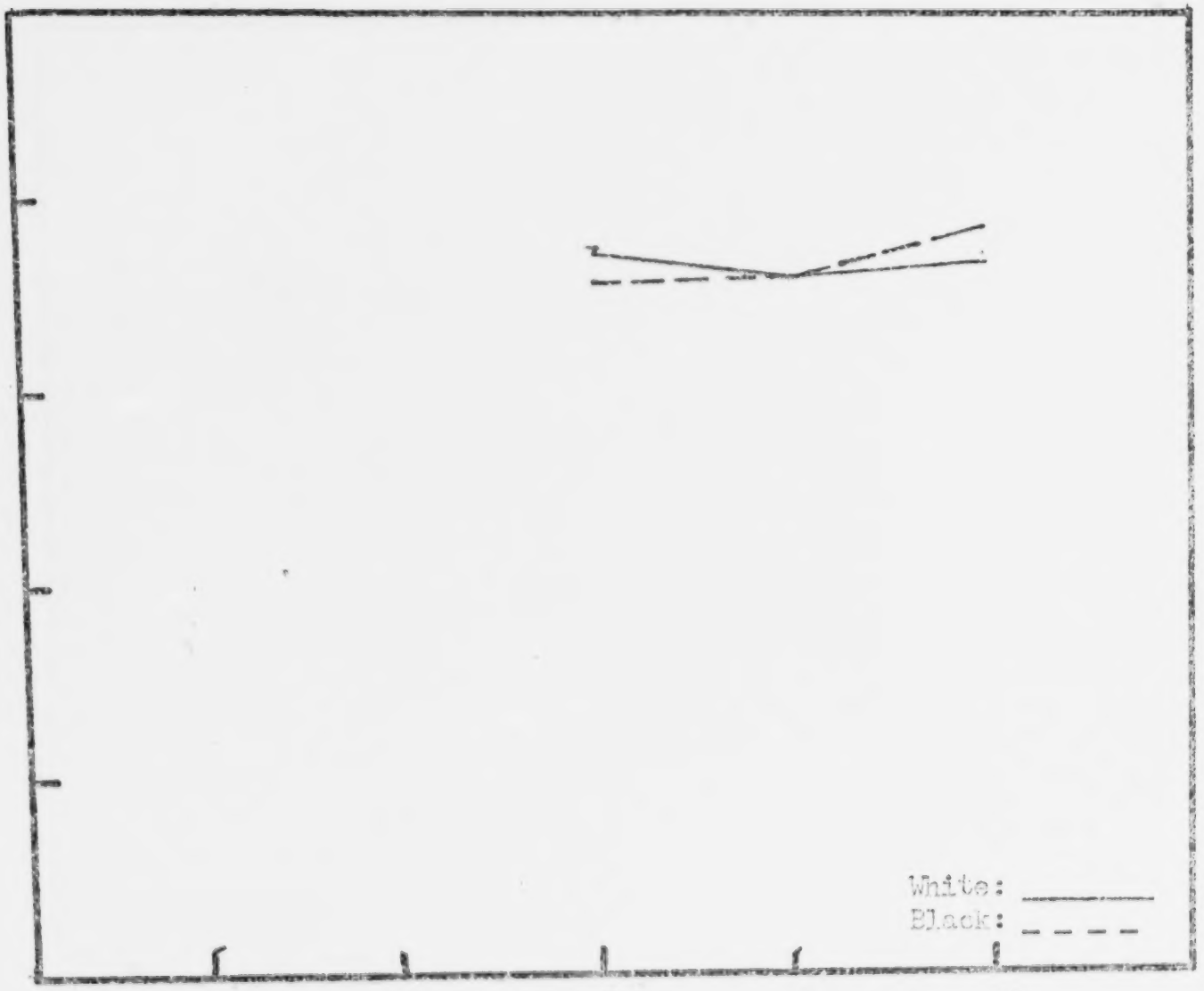
	6	9	12
White Mean:	3.2	2.8	2.5
Black Mean:	3.2	2.6	2.4
	NS	NS	NS

Figure 27. Grouping: White -- Black Comparison
II



	6	9	12
Male Mean:	3.2	3.1	2.5
Female Mean:	3.2	2.5	2.5
	NS	z=4.6 p=.01	NS

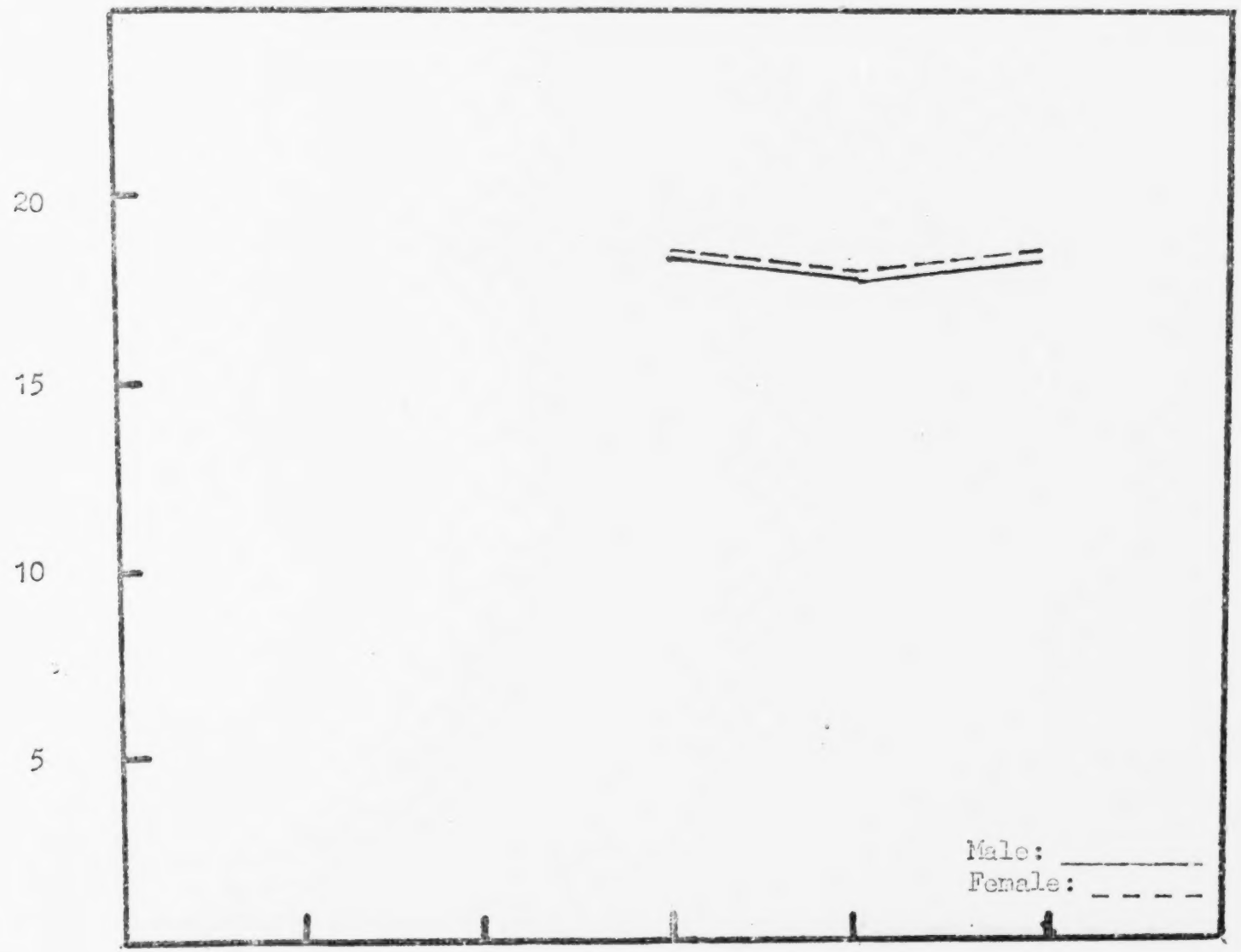
Figure 28. Grouping: Male - Female Comparison
II



	6	9	12
White Mean:	18.5	17.8	18.2
Black Mean:	17.7	17.7	18.8
	z=3.0 p=.01	NS	z=2.3 p=.05

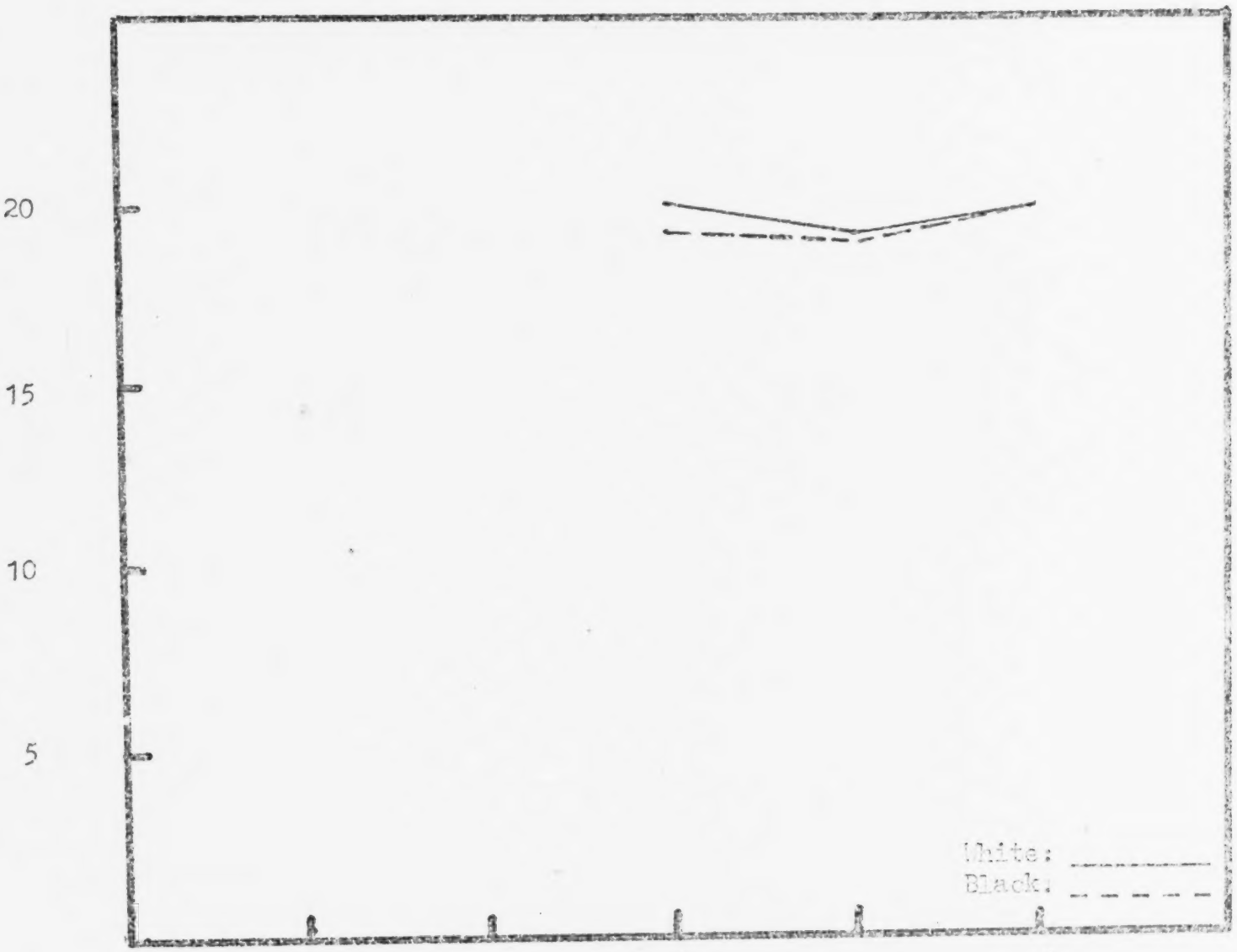
Figure 29. Evaluative: White - Black Comparison

SELF



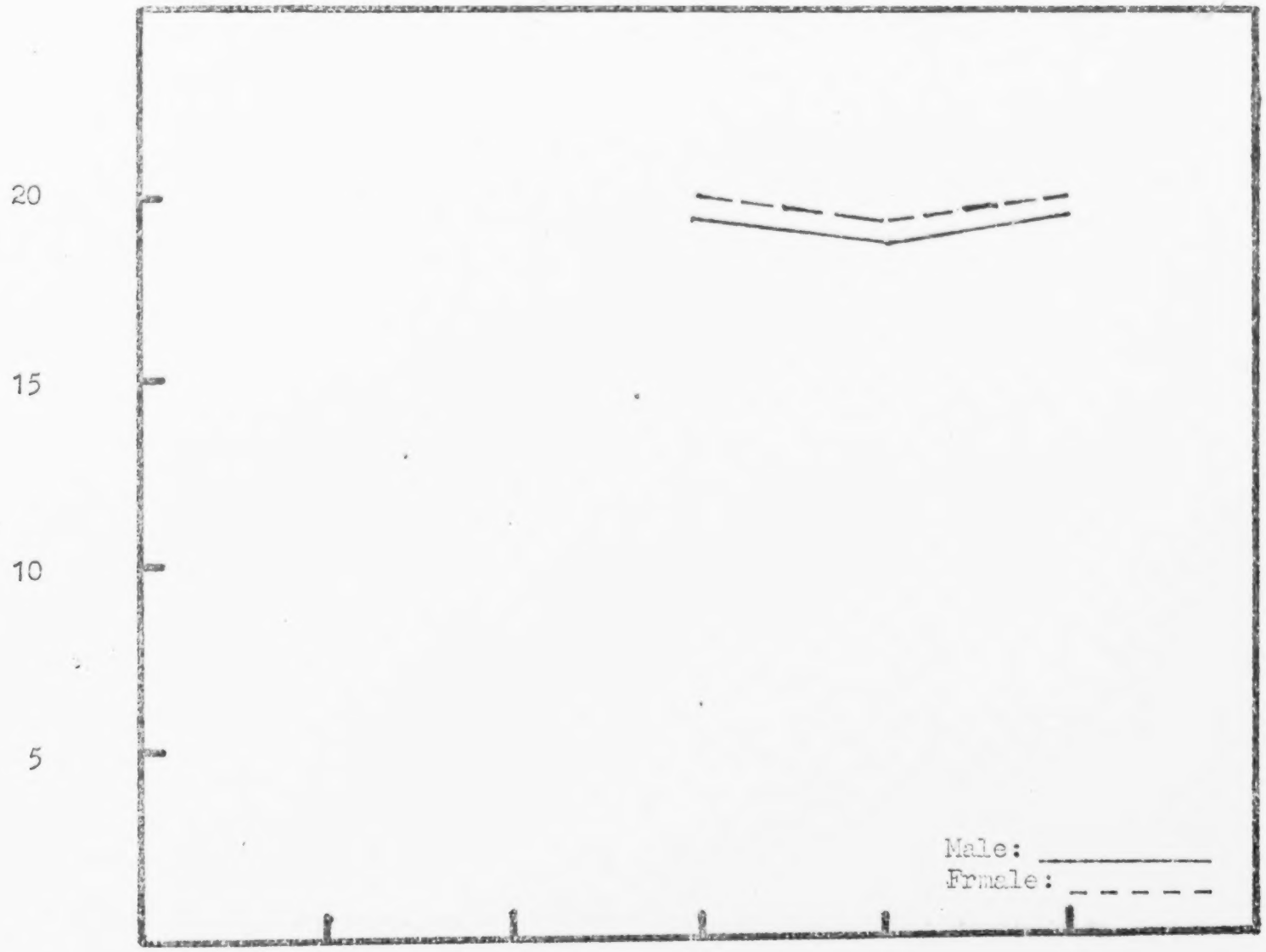
Grade:	6	9	12
Male Mean:	18.1	17.7	18.2
Female Mean:	18.3	17.9	18.5
	NS	NS	NS

Figure 30. Evaluative: Male - Female Comparison
SELF



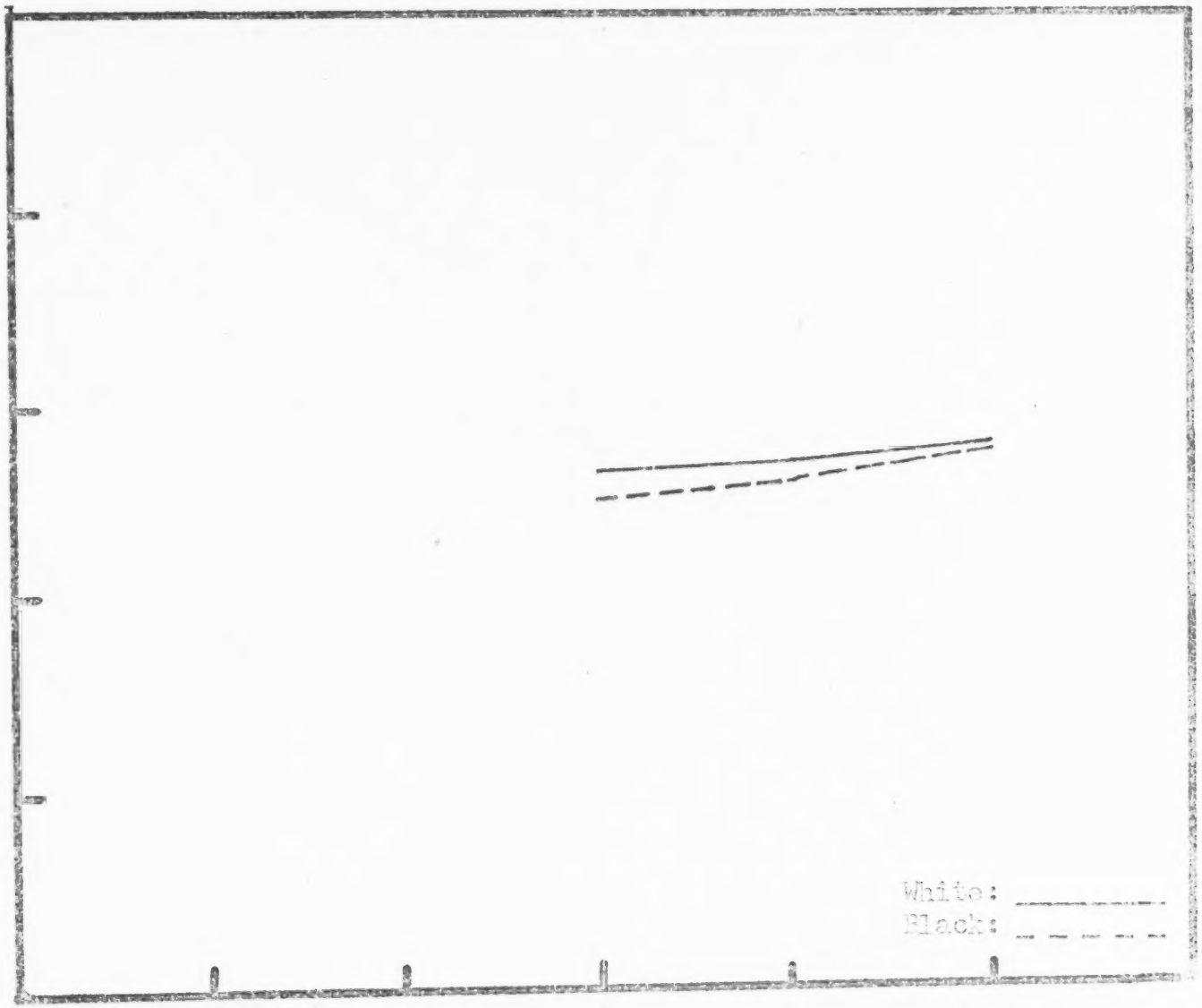
Grade:	6	9	12
White Mean:	19.3	19.1	19.6
Black Mean:	19.2	18.9	19.6
	NS	NS	NS

Figure 31. Evaluative: White - Black Comparison
IDEAL SELF



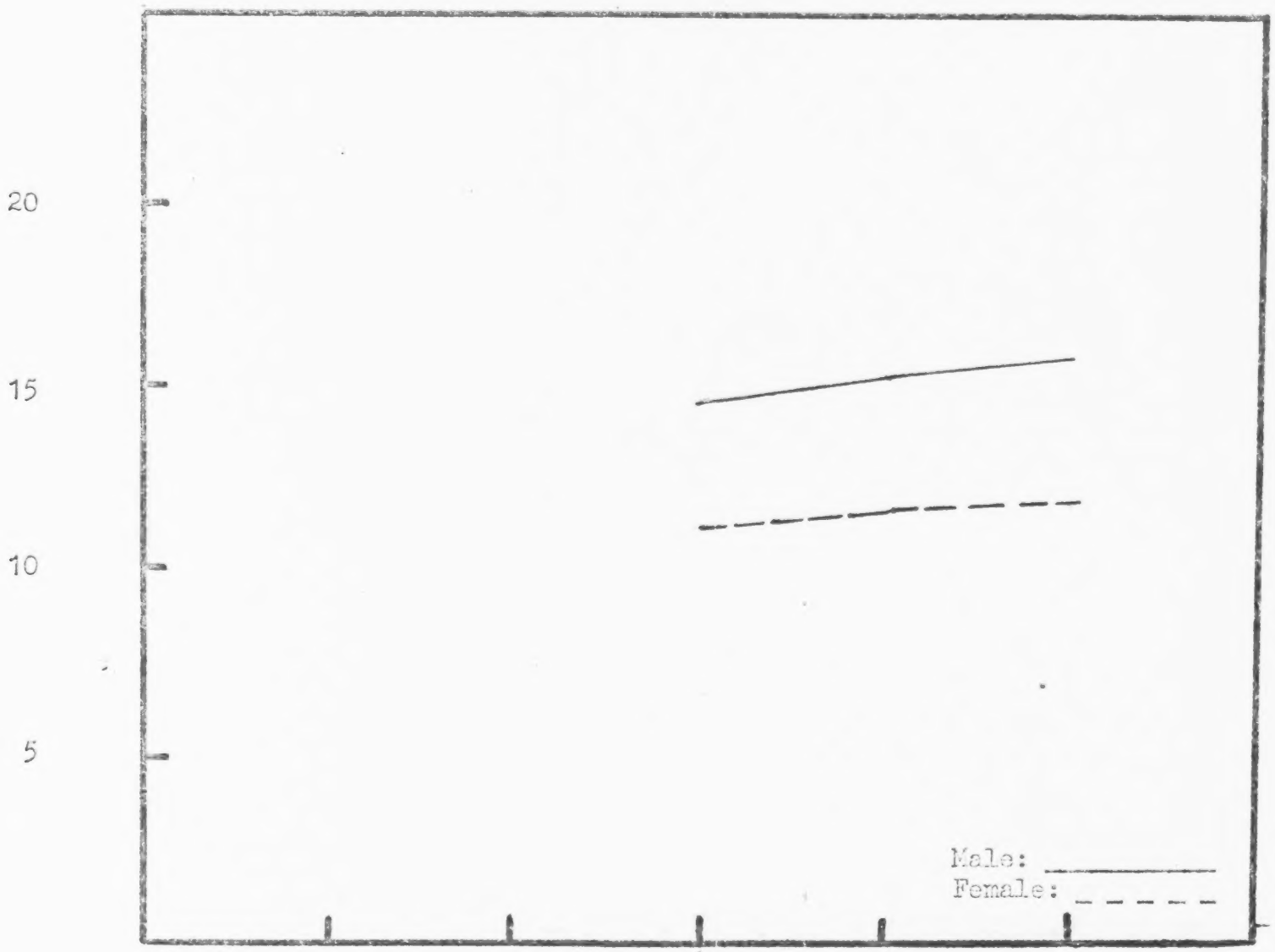
Male Mean:	19.4	18.7	19.5
Female Mean:	19.9	19.3	19.8
	NS	z=3.0 p=.01	NS

Figure 32. Evaluative: Male - Female Comparison
IDEAL SELF



Grade:	6	9	12
White Mean:	13.1	13.4	13.7
Black Mean:	12.6	12.9	13.5
	NS	NS	[illegible]

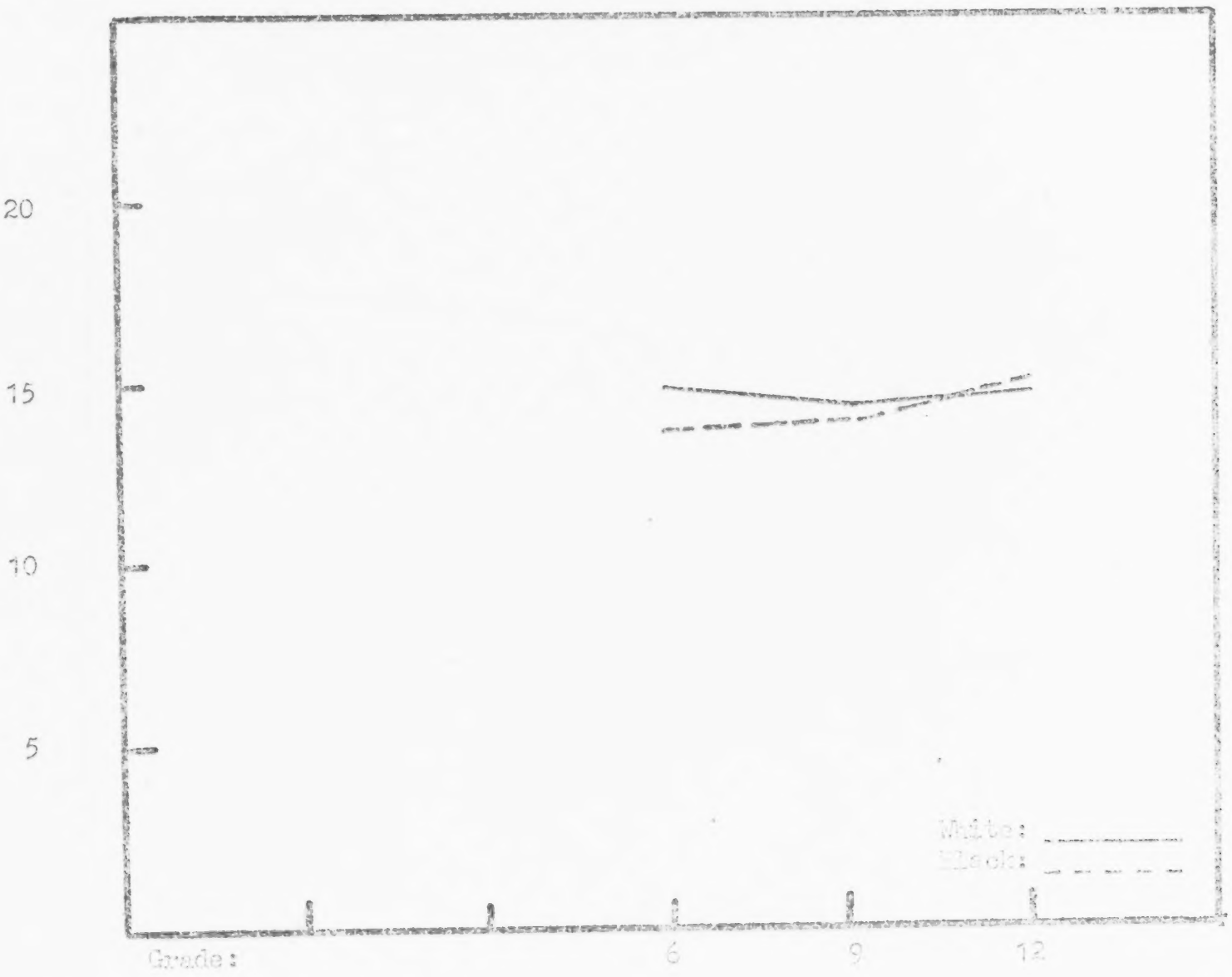
Figure 33. Potency: White - Black Comparison
SELF



	6	9	12
Male Mean:	14.6	15.2	15.7
Female Mean:	11.1	11.6	11.7
	z=14.2 p=.01	p=.01	p=.01

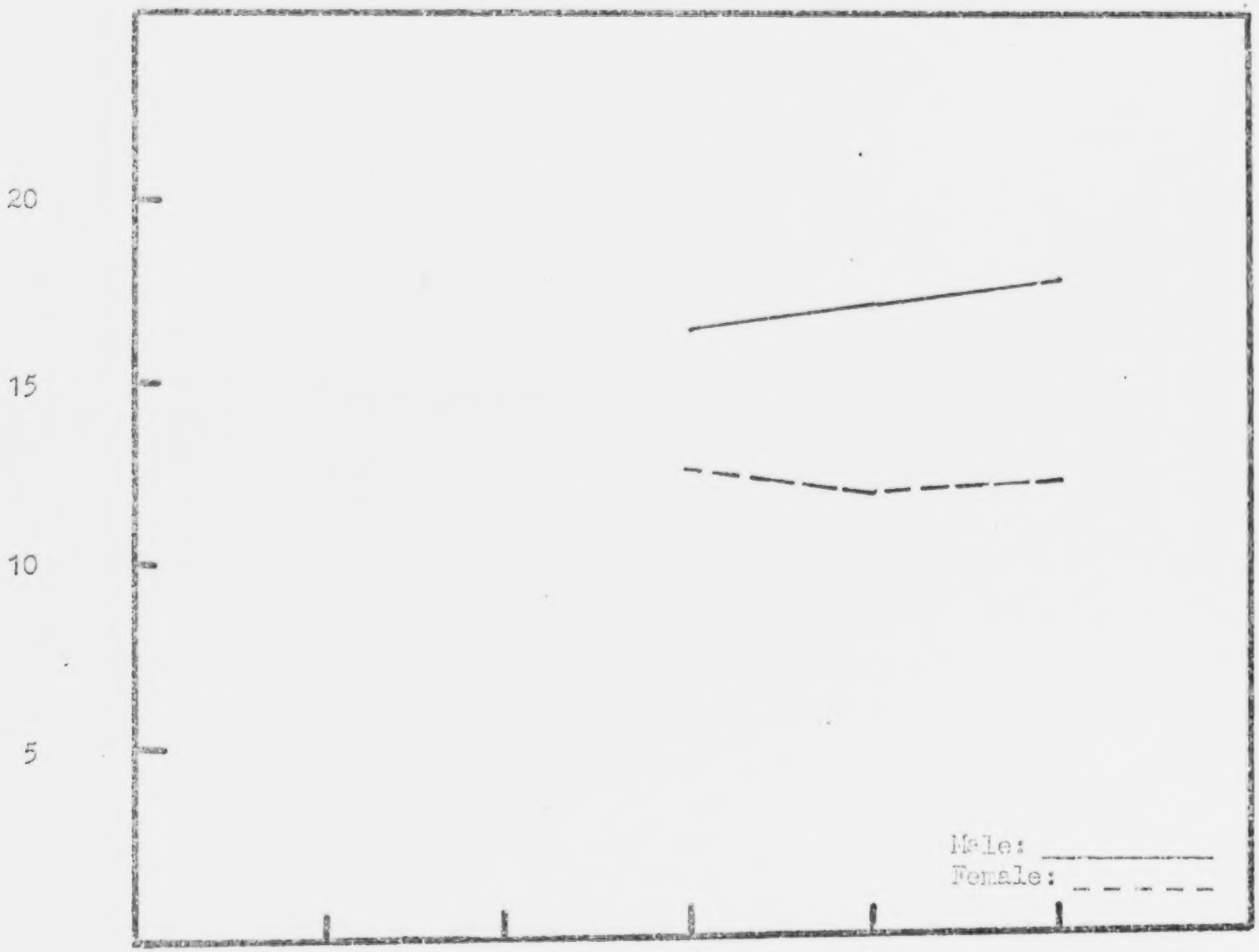
Figure 34. Potency: Male - Female Comparison

SELF



	6	9	12
White Mean:	14.9	14.4	14.3
Black Mean:	13.7	14.0	15.2
	u=3.1 p=.01	NS	NS

Figure 35. Sobanoy: White - Black Comparison
IDEAL SELF

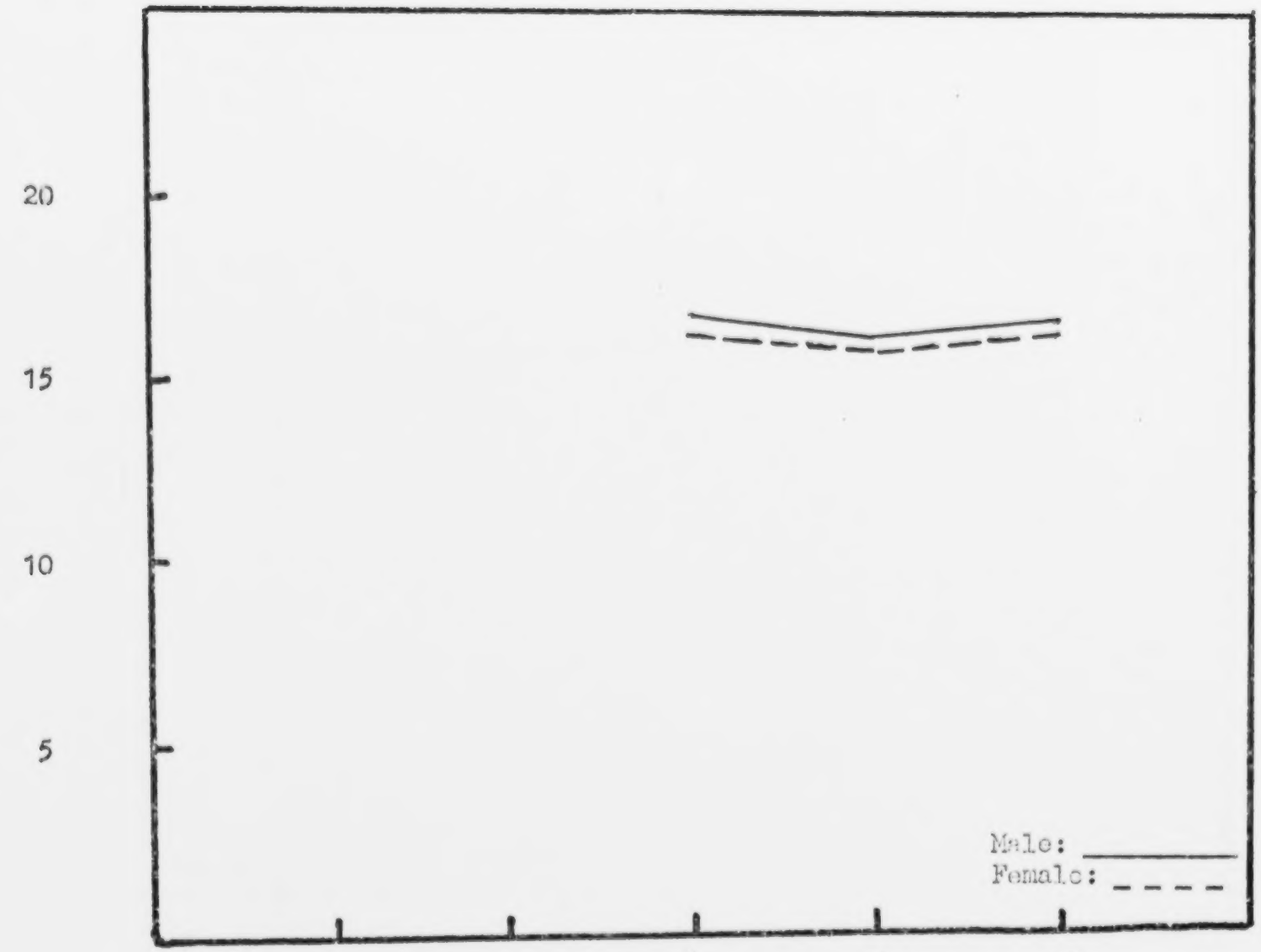


Grade:	6	9	12
Male Mean:	16.4	16.9	17.7
Female Mean:	12.5	12.0	12.3
	p=.01	p=.01	p=.01

Figure 36. Potency: Male - Female Comparison
IDEAL SELF

Grade:	6	9	12
White Mean:	16.3	16.0	16.3
Black Mean:	16.6	15.8	15.8
	NS	NS	NS

Figure 37. Activity - Self: Black - White Comparison

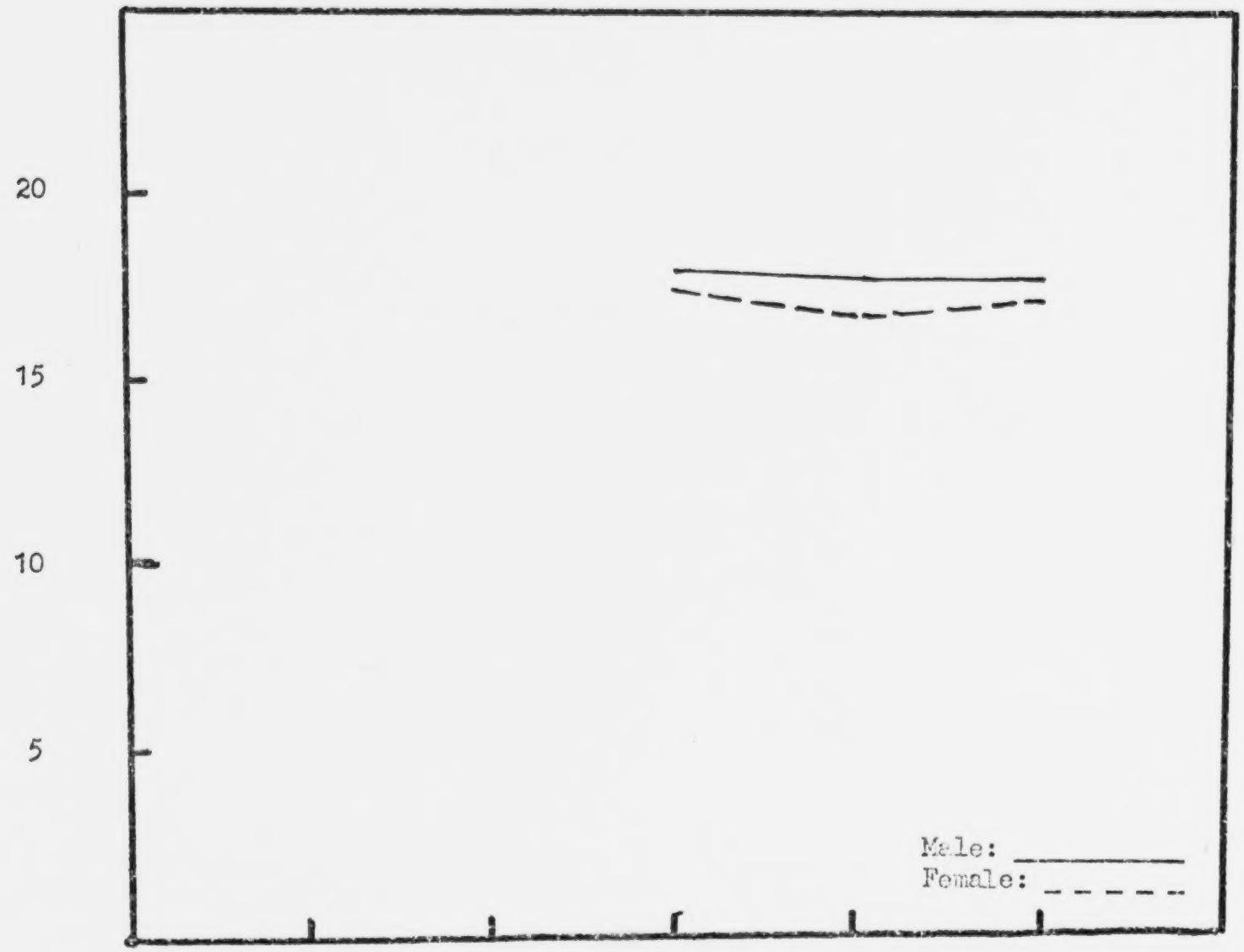


Grade:	6	9	12
Male Mean:	16.6	16.1	16.4
Female Mean:	16.2	15.8	16.1
	NS	NS	NS

Figure 38. Activity - Self: Male - Female Comparison

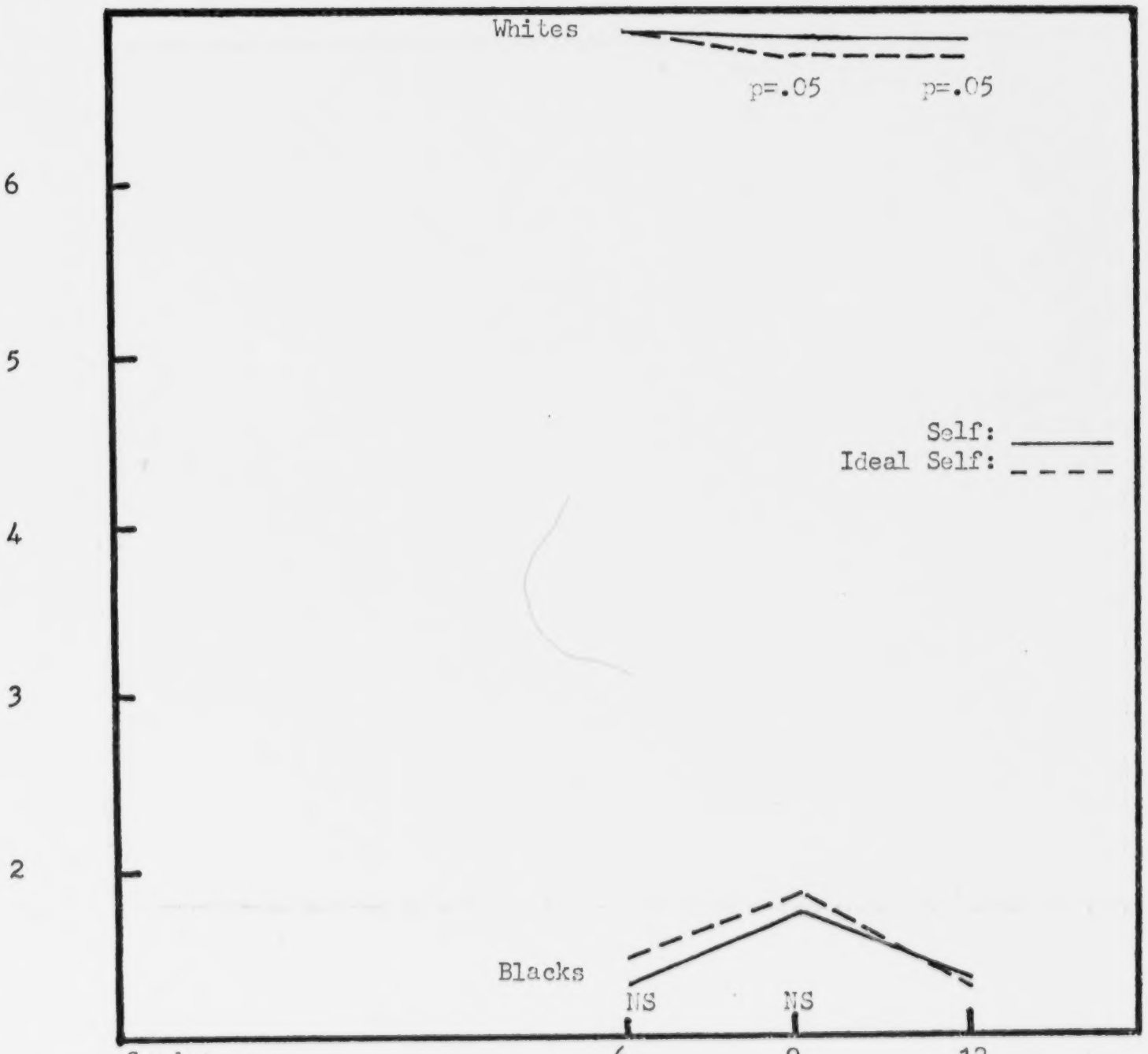
	6	9	12
White Mean:	17.6	17.3	17.6
Black Mean:	17.7	16.6	16.6
	NS	z=2.8 p=.01	z=3.6 p=.01

Figure 39. Activity - Ideal Self: White - Black



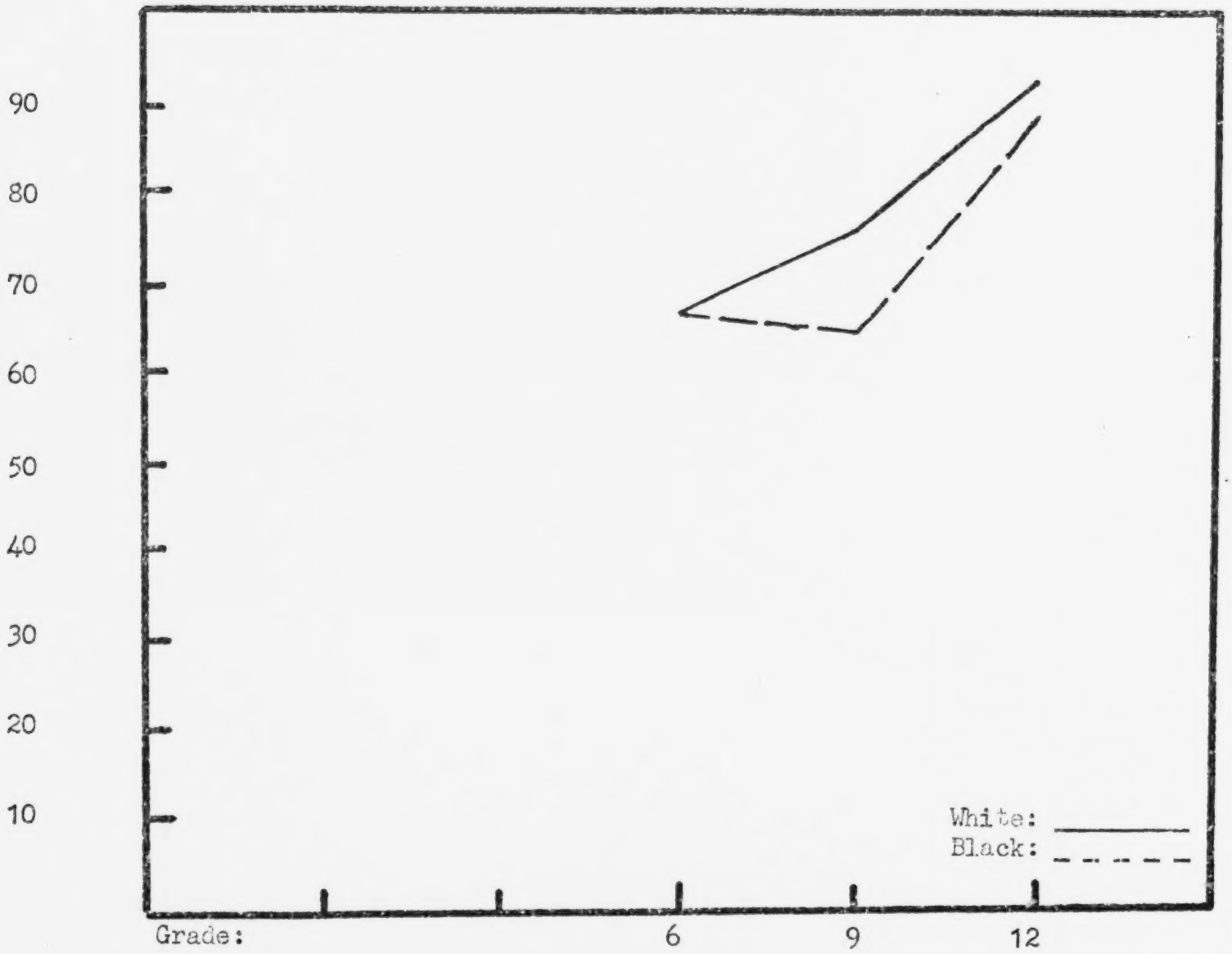
	6	9	12
Male Mean:	17.8	17.6	17.7
Female Mean:	17.4	16.7	17.0

Figure 40. Activity - Ideal Self: Male - Female Comparison



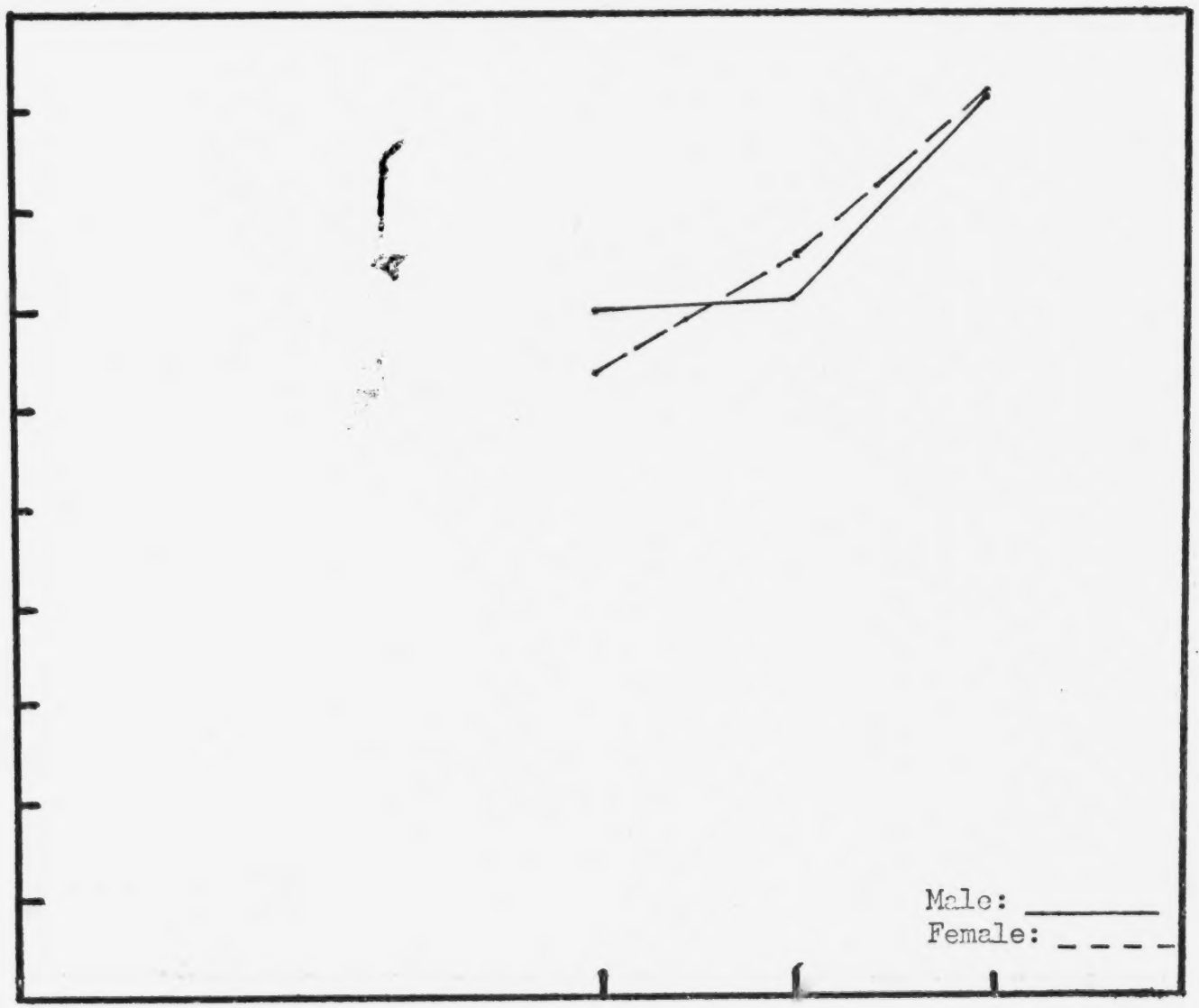
Grade:		6	9	12
White Mean:	Self	6.9	6.8	6.8
	Ideal Self	6.9	6.7	6.7
Black Mean:	Self	1.4	1.3	1.4
	Ideal Self	1.5	1.9	1.3

Figure 41. Self - Self Ideal: Black - White Comparison



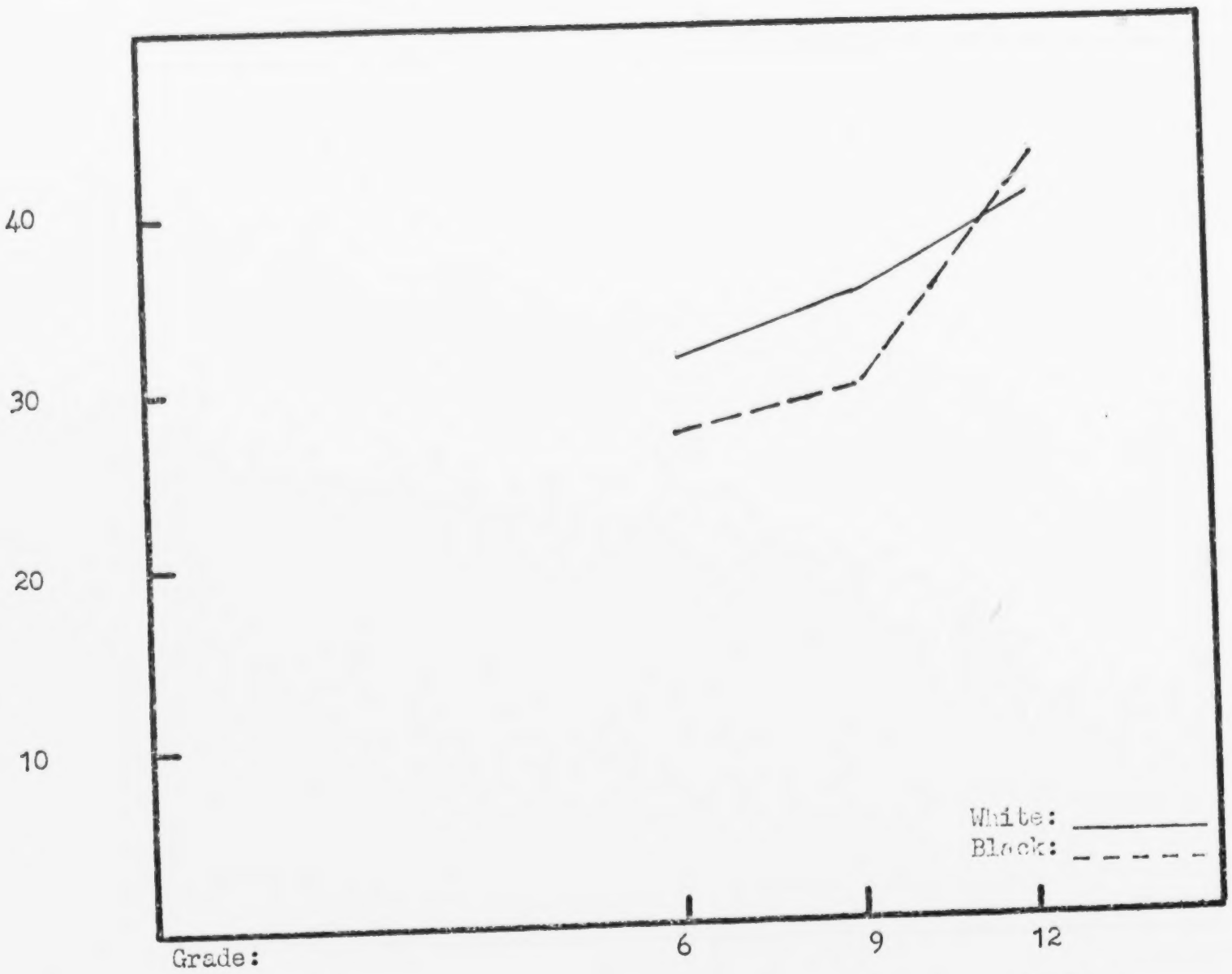
White Mean:	66.3	75.4	92.1
Black Mean:	66.5	64.5	88.6
	NS	z=3.7 p=.01	NS

Figure 42. Number of Adjectives Checked: White - Black Comparison



Grade:	6	9	12
Male Mean:	69.1	70.1	91.1
Female Mean:	63.3	74.7	91.5
	z=2.1 p=.05	NS	NS

Figure 43. Number of Adjectives Checked: Male - Female Comparison



White Mean:	30.2	34.9	40.5
Black Mean:	27.3	29.8	42.3
	z=2.5 p=.05	z=4.1 p=.01	z=1.2 NS

Figure 44. Favorable Adjectives Checked: White - Black Comparison

Grade:	6	9	12
Male Mean:	29.1	32.8	40.7
Female Mean:	29.7	34.5	41.2
	NS	NS	NS

Figure 45. Favorable Adjectives Checked: Male - Female Comparison

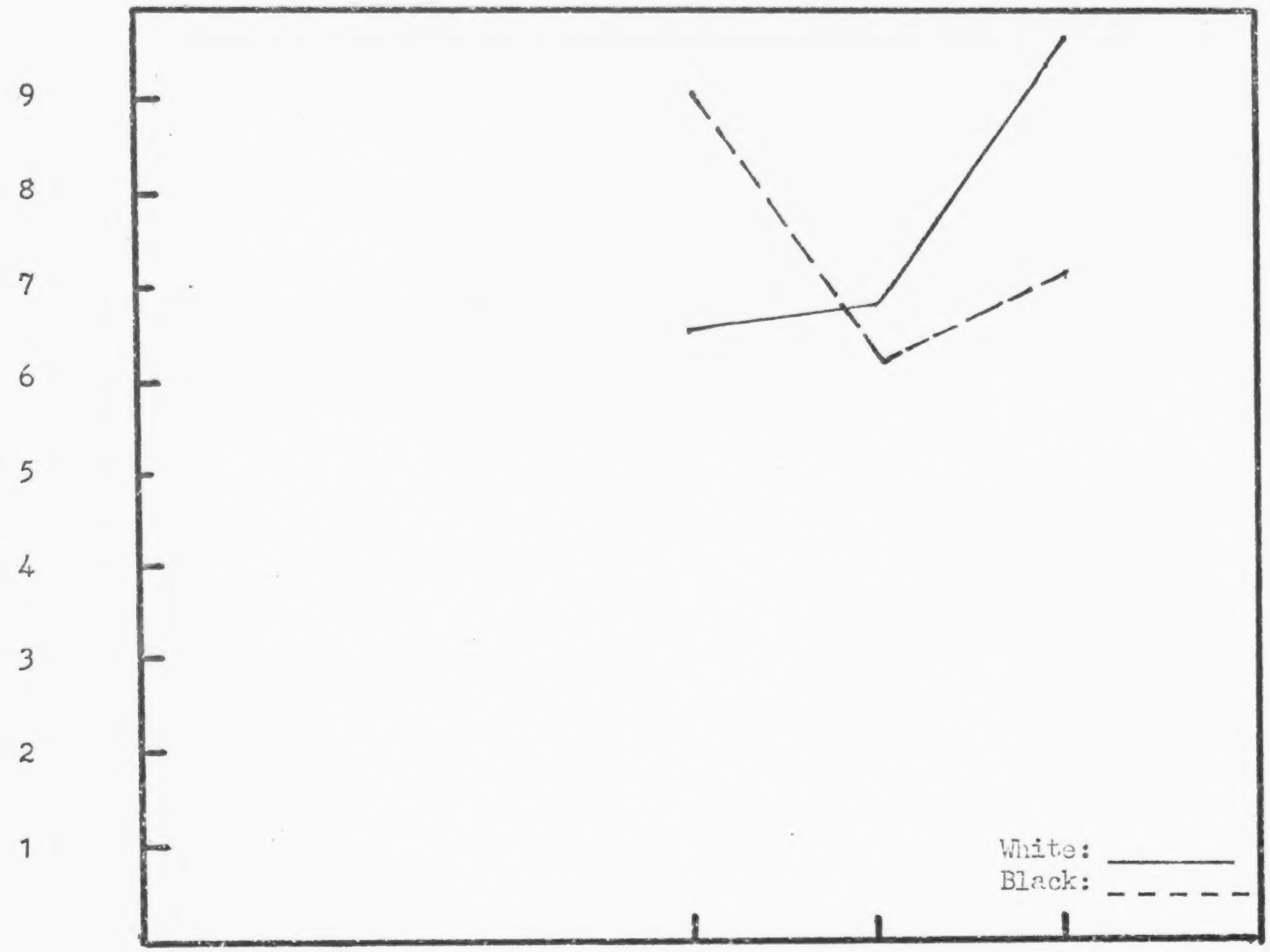
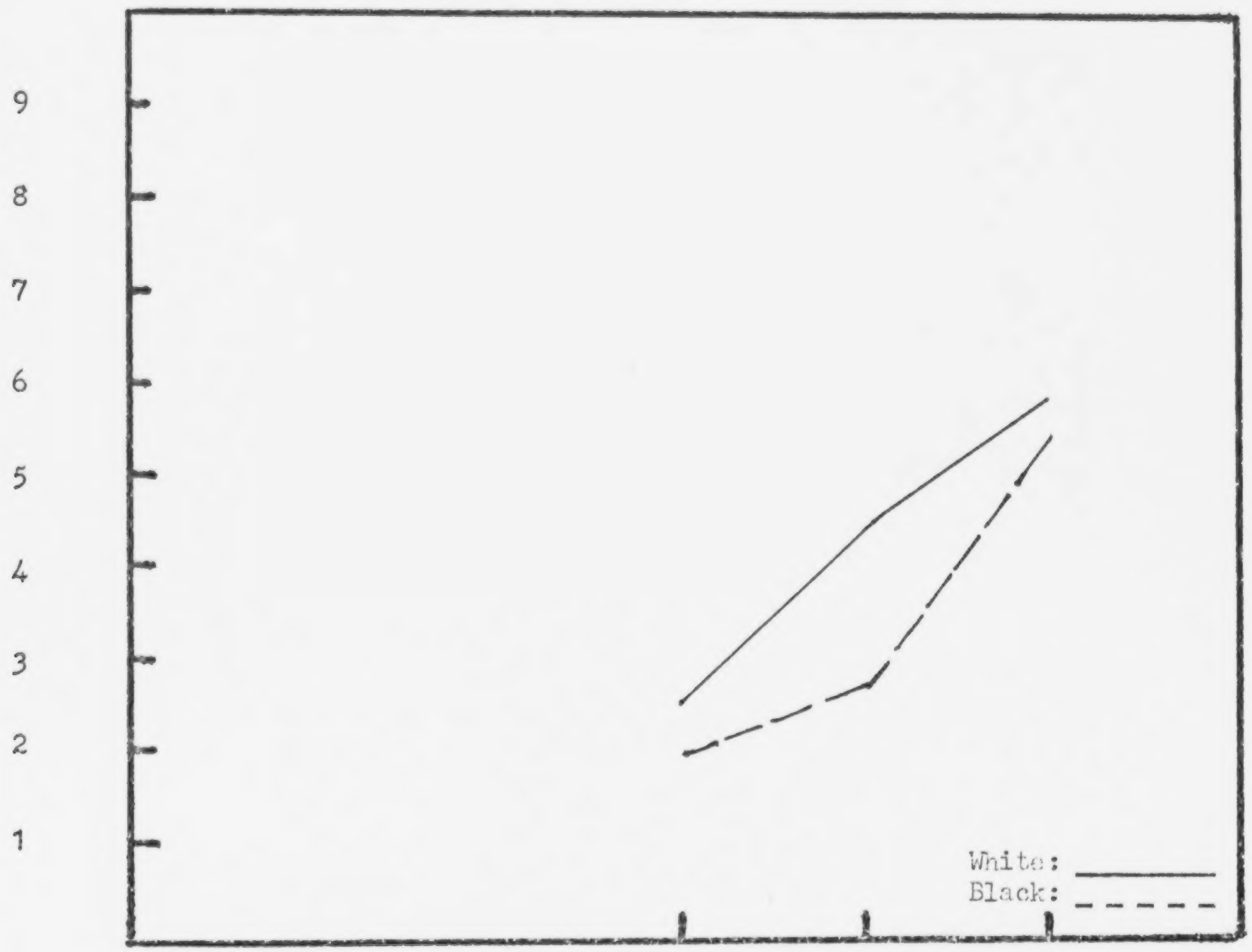


Figure 46. Unfavorable Adjectives Checked: Black - White Comparison

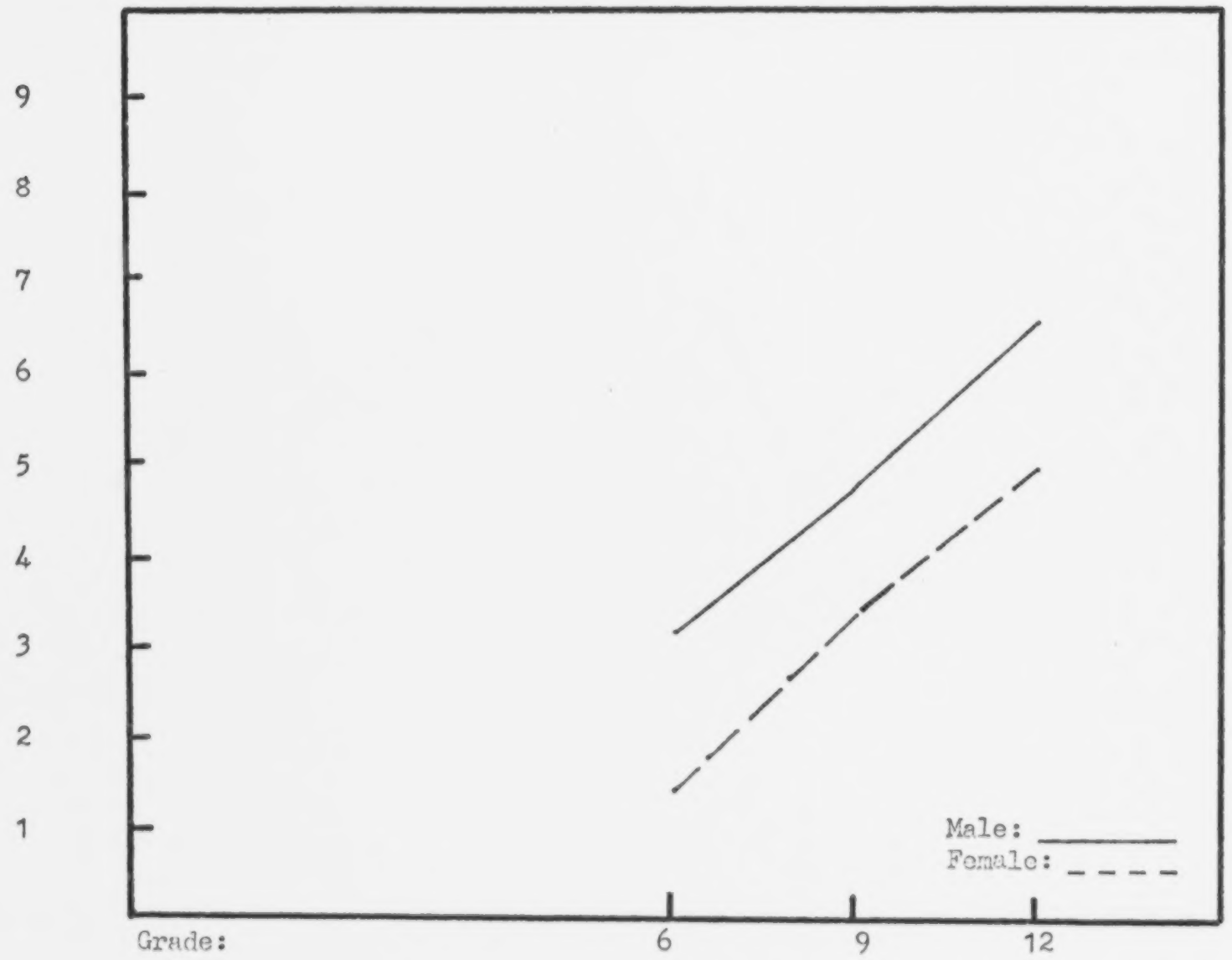
Grade:	6	9	12
Male Mean:	8.1	6.7	8.9
Female Mean:	6.1	6.5	9.3
	z=2.8 p=.01	NS	NS

Figure 47. Unfavorable Adjectives Checked: Male - Female Comparison



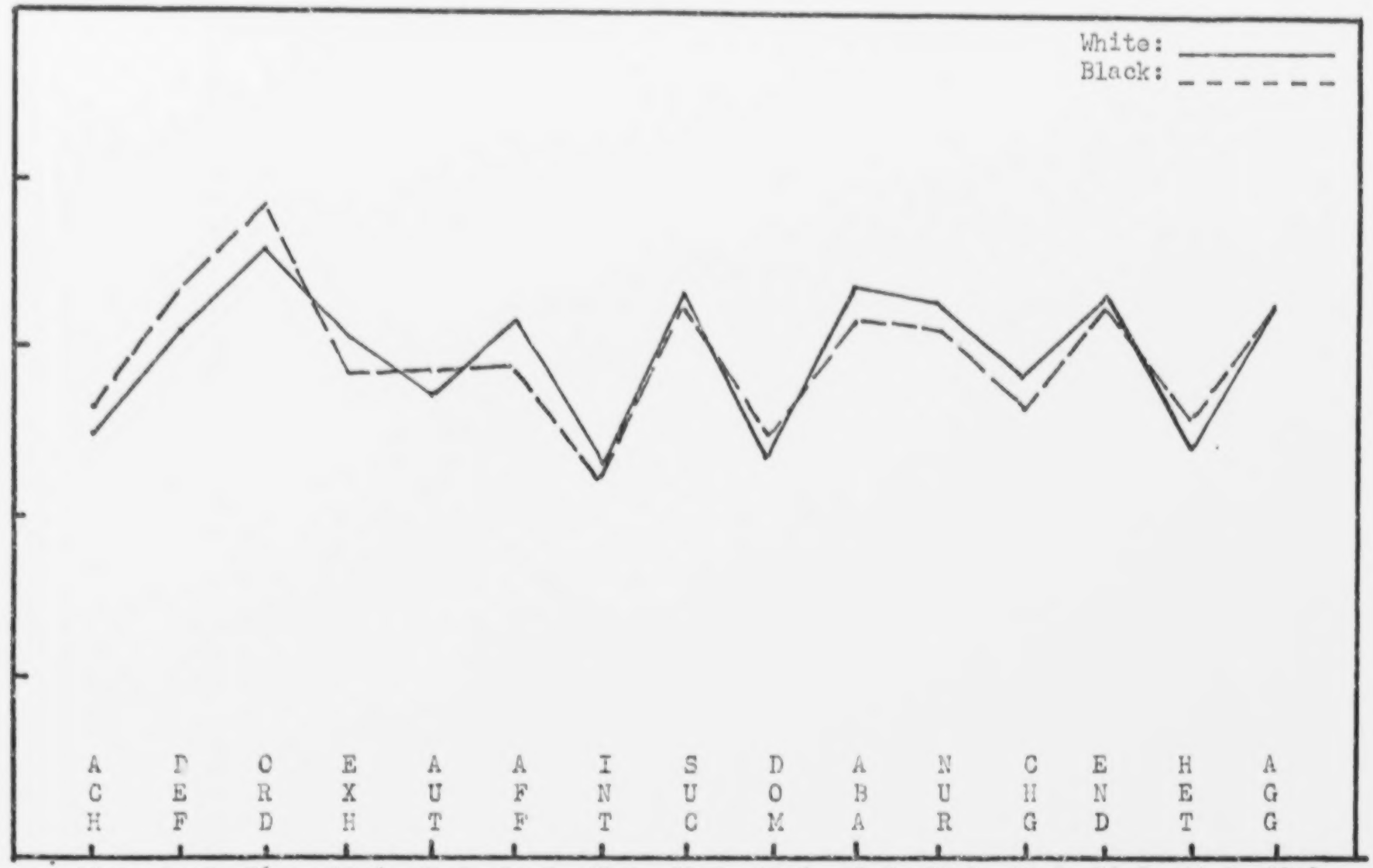
Grade:	6	9	12
White Mean:	2.3	4.4	5.8
Black Mean:	2.0	2.7	5.3
	z=1.6 NS	z=4.9 p=.05	z=1.2 NS

Figure 48. Self Confidence: Black - White Comparison



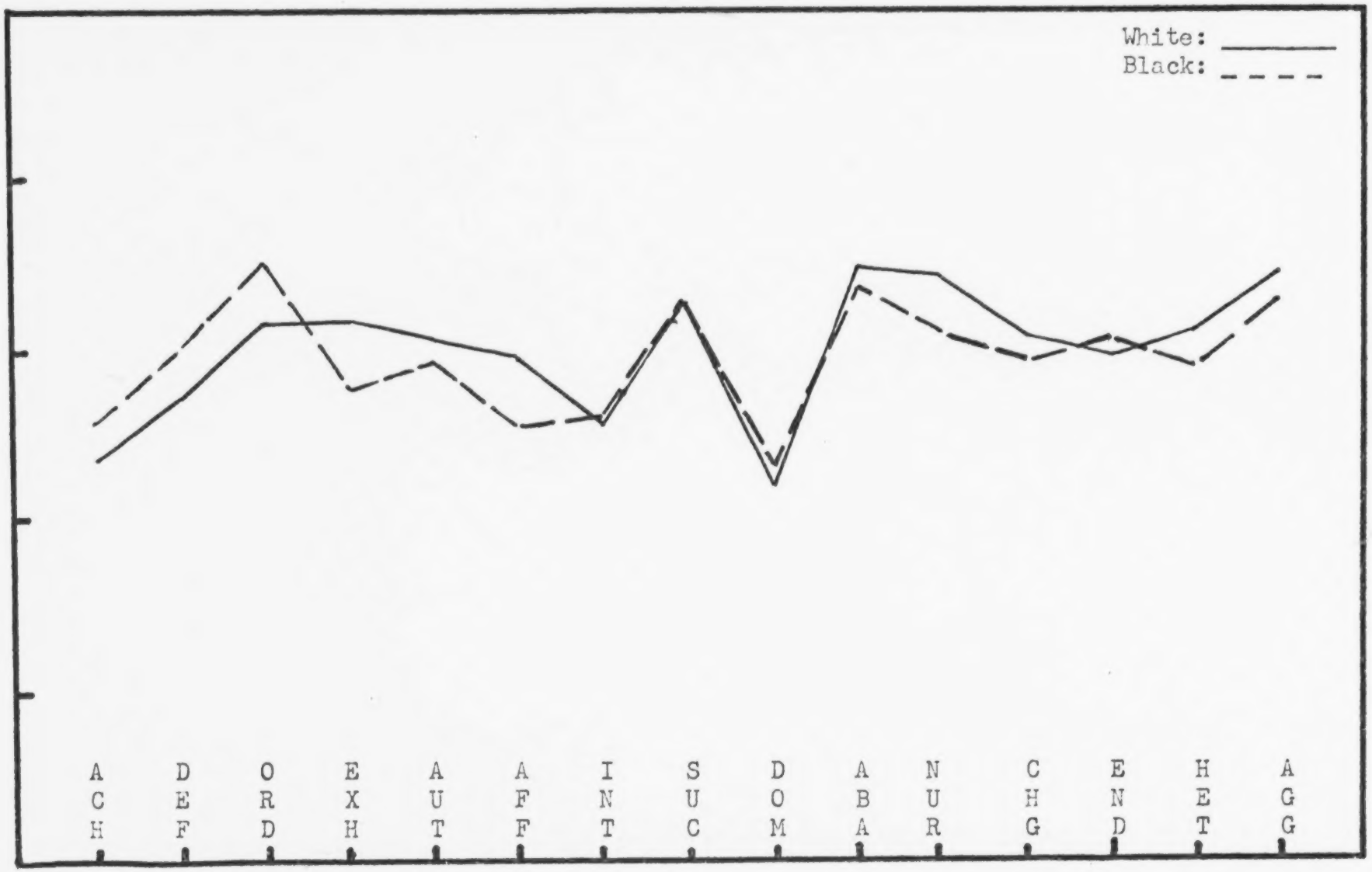
Male Mean:	3.2	4.7	6.6
Female Mean:	1.4	3.3	4.9
	z=6.2 p=.01	z=4.3 p=.01	z=3.7 p=.01

Figure 49. Self Confidence: Male - Female Comparison



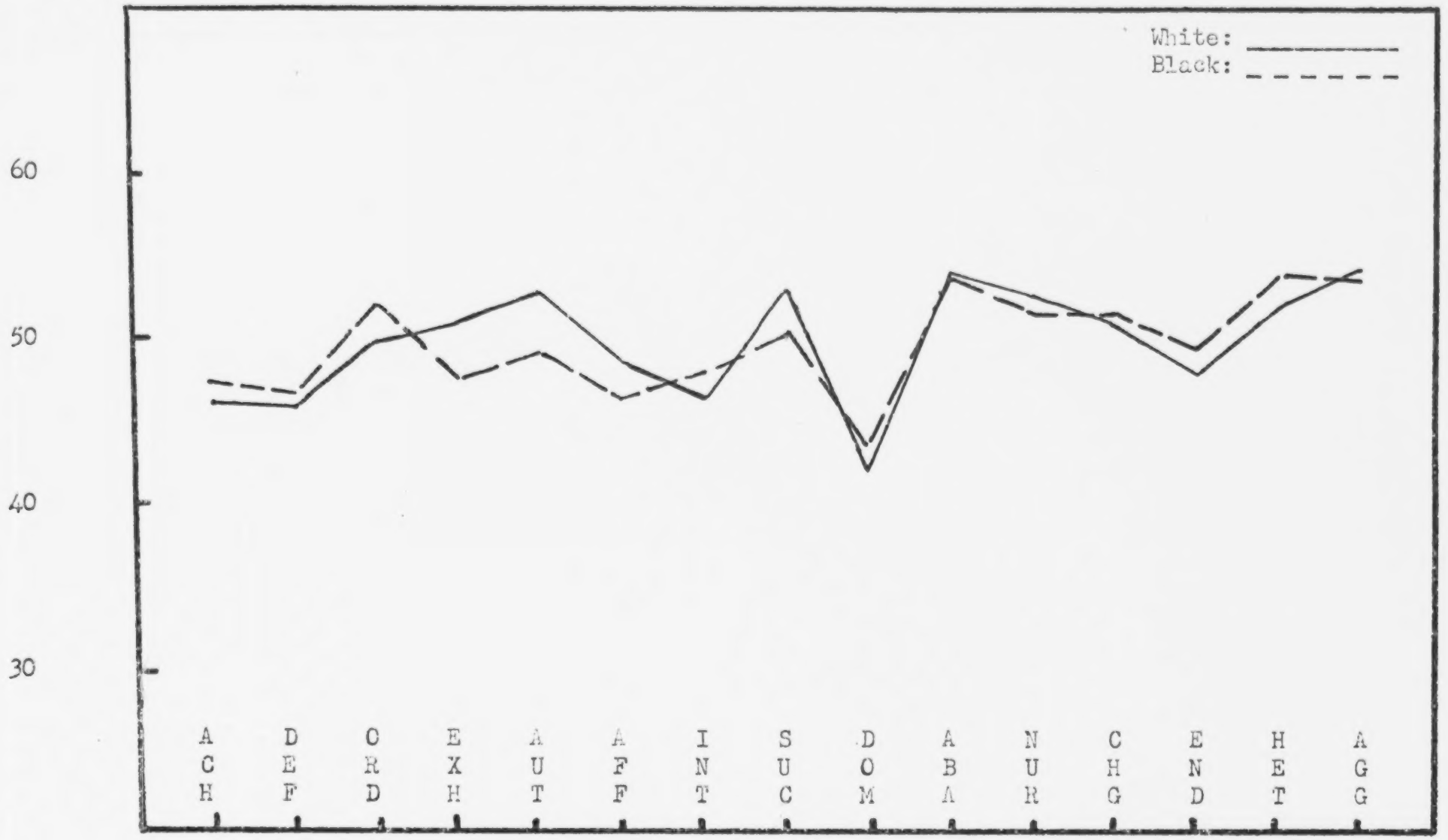
	ACH	DEF	ORD	EXH	AUT	AFF	INT	SUC	DOM	ABA	NUR	CHG	END	HET	AGG
White Mean:	45.1	51.2	56.1	50.8	47.3	51.8	43.1	53.3	43.8	53.8	52.9	48.3	53.2	44.3	52.9
Black Mean:	46.2	53.3	58.4	48.8	48.9	49.4	42.6	52.8	44.8	51.5	51.2	46.6	52.7	45.8	52.5
z=	2.5	2.5	3.4	2.7	2.3	3.1				3.3	2.5	2.5		1.4	
p=	.05	.05	.01	.01	.05	.01	NS	NS	NS	.01	.05	.05	NS	NS	NS

Figure 50. EPPS: Black - White Comparison At Sixth Grade



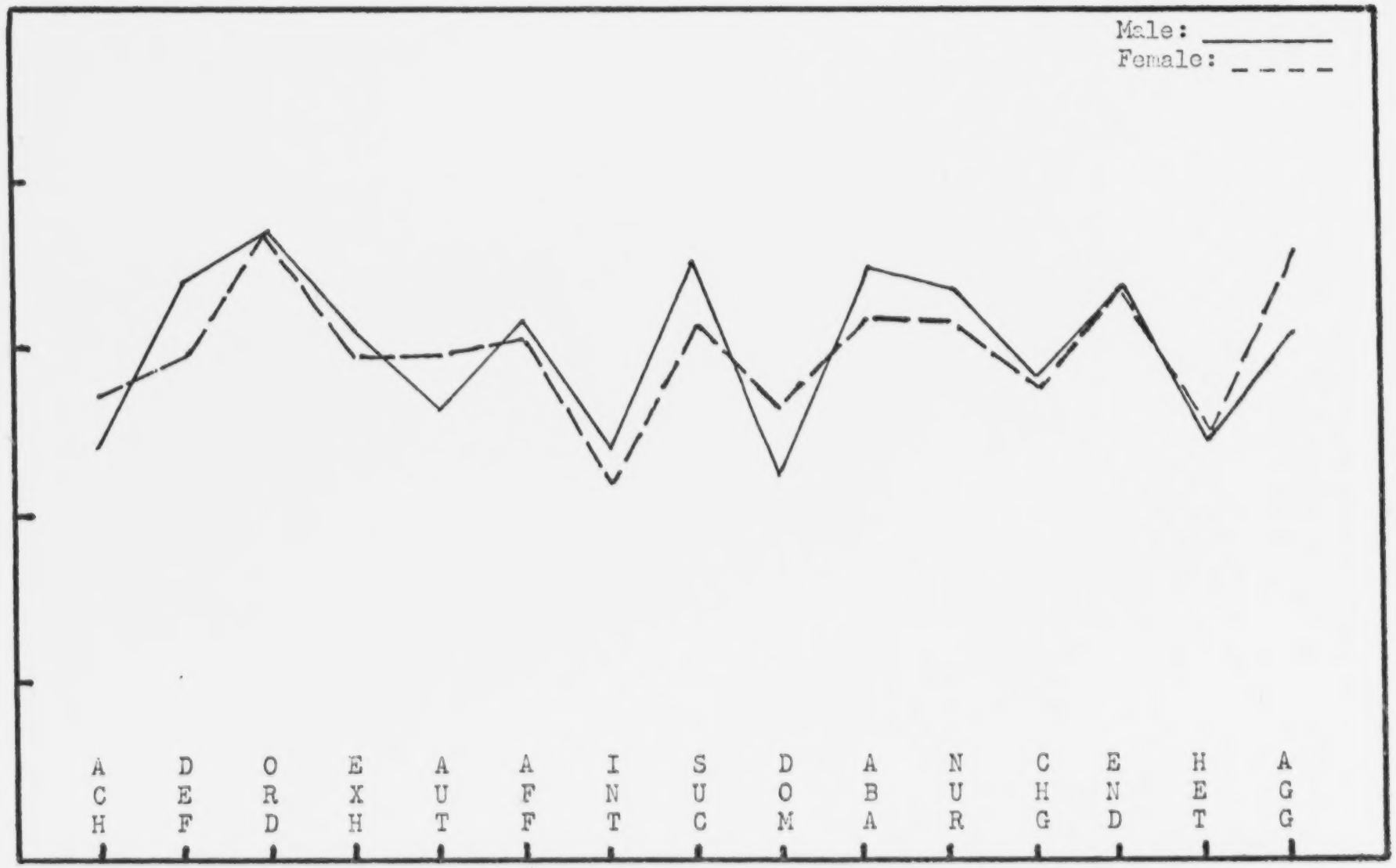
	ACH	DEF	ORD	EXH	AUT	AFF	INT	SUC	DOM	ABA	NUR	CHG	END	HET	AGG
White Mean:	43.5	47.1	51.2	51.3	50.3	49.6	45.6	52.5	41.8	54.5	54.0	50.4	49.6	50.9	54.2
Black Mean:	45.8	50.0	55.1	47.8	49.4	45.5	46.0	52.9	42.9	53.2	50.7	49.0	50.2	48.9	52.8
z=	2.9	3.8	4.4	4.0	1.0	4.7			1.5	1.8	4.2	2.0		2.0	1.7
p=	.01	.01	.01	.01	NS	.01	NS	NS	NS	NS	.01	NS	NS	.05	NS

Figure 51. EPPS: Black - White Comparison At Ninth Grade



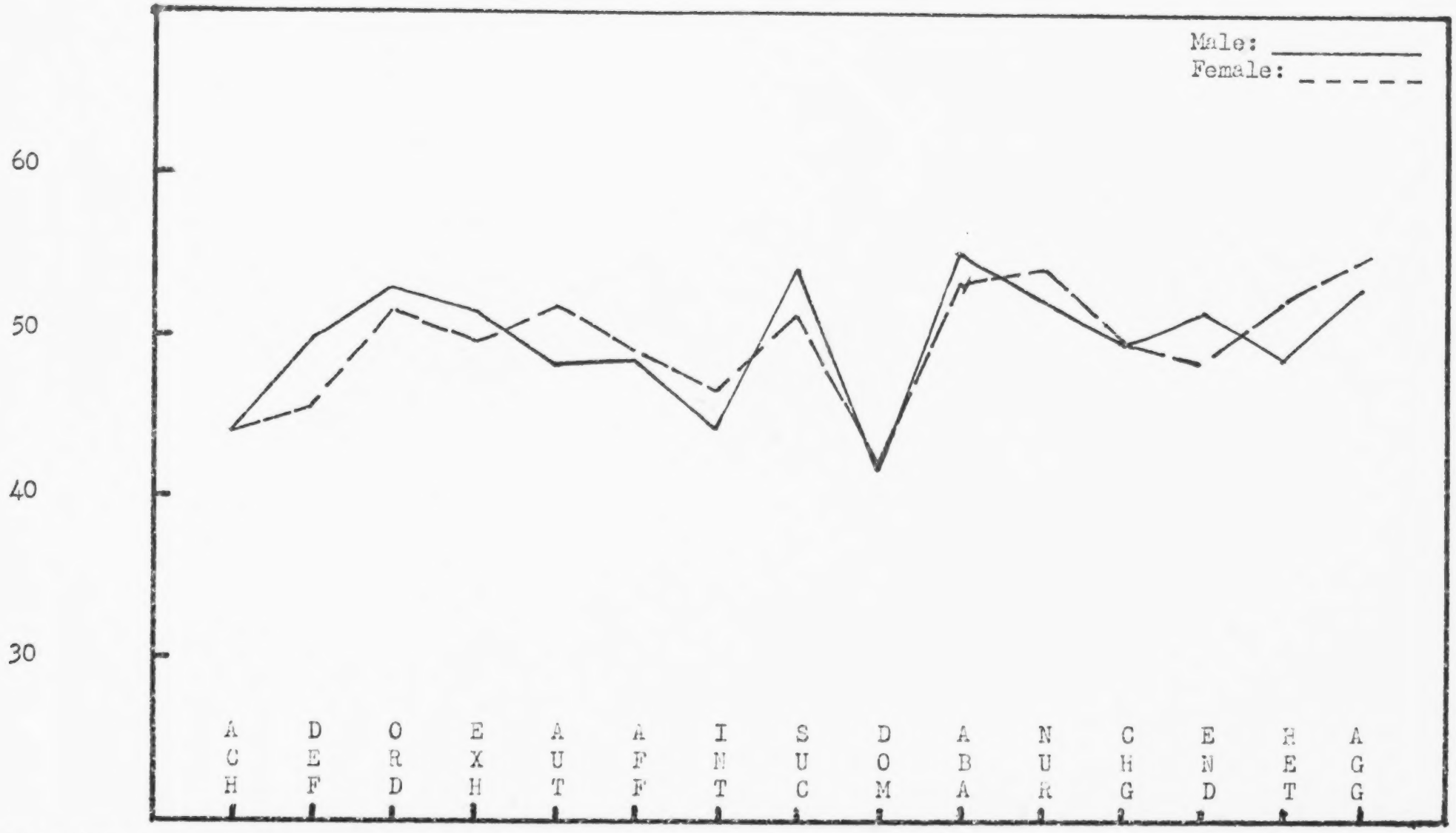
White Mean:	46.1	45.9	49.8	50.9	52.8	48.5	46.2	52.8	41.7	53.9	52.3	51.0	47.8	51.9	54.0
Black Mean:	47.3	46.8	52.1	47.4	49.2	46.2	47.9	50.4	43.5	53.6	51.6	51.2	49.2	53.5	53.7
z=	1.4	.9	2.1	3.1	3.6	1.8	1.7	2.3	1.7				1.4	1.1	
p=	NS	NS	.05	.01	.01	NS	NS	.05	NS	NS	NS	NS	NS	NS	NS

Figure 52. EPPS: Black - White Comparison At Twelfth Grade



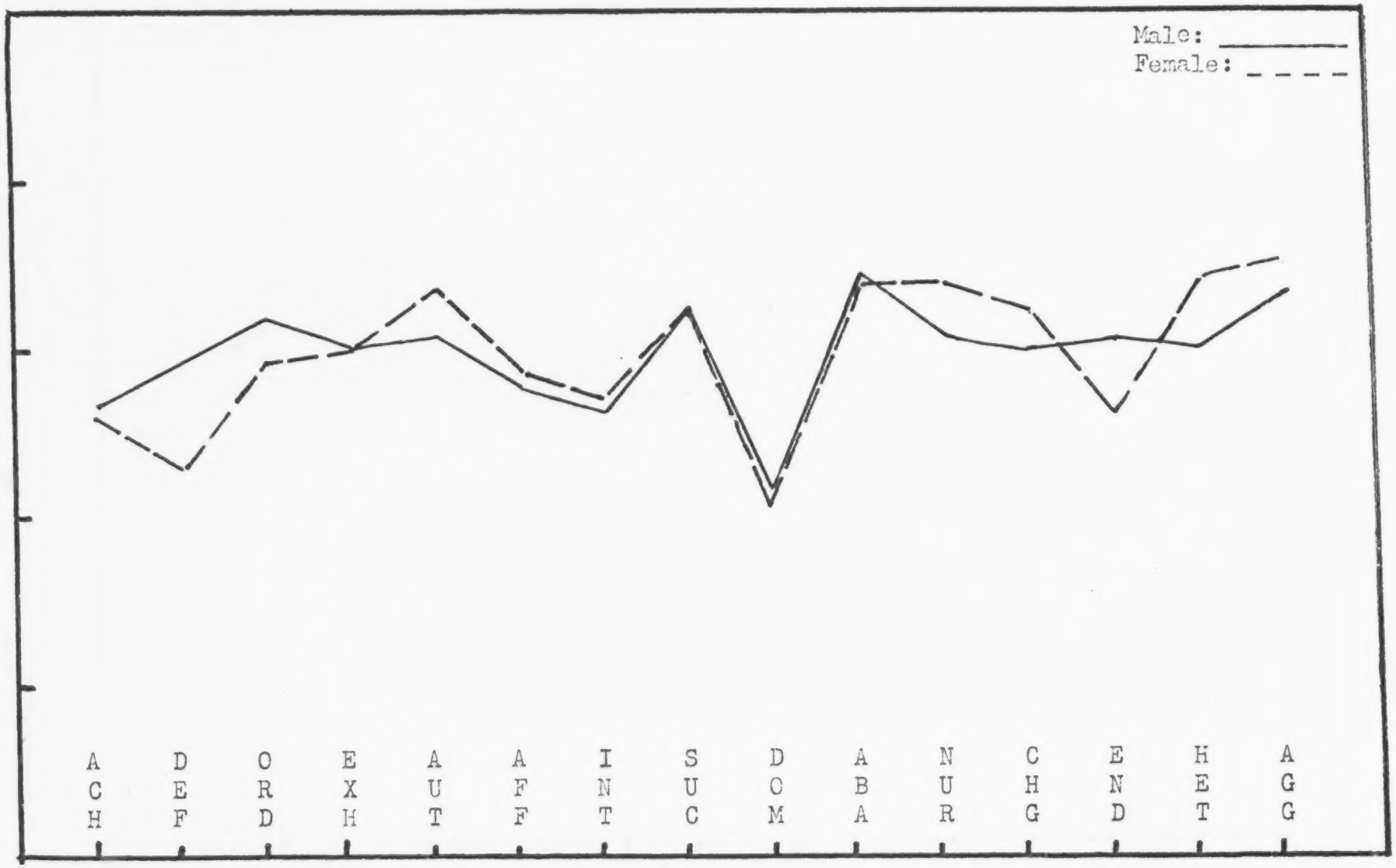
Male Mean:	44.0	53.9	56.8	50.9	46.2	51.7	43.8	55.0	42.1	54.6	53.3	48.0	53.2	44.4	50.5
Female Mean:	47.3	49.3	56.5	49.6	49.4	50.6	42.0	51.0	46.3	51.7	51.7	47.7	53.0	45.0	55.4
z=	5.6	6.1		1.9	5.1	1.5	3.5	6.0	7.5	4.8	2.4				8.0
p=	.01	.01	NS	NS	.01	NS	.01	.01	.01	.01	.05	NS	NS	NS	.01

Figure 53. EPPS: Male - Female Comparison At Sixth Grade



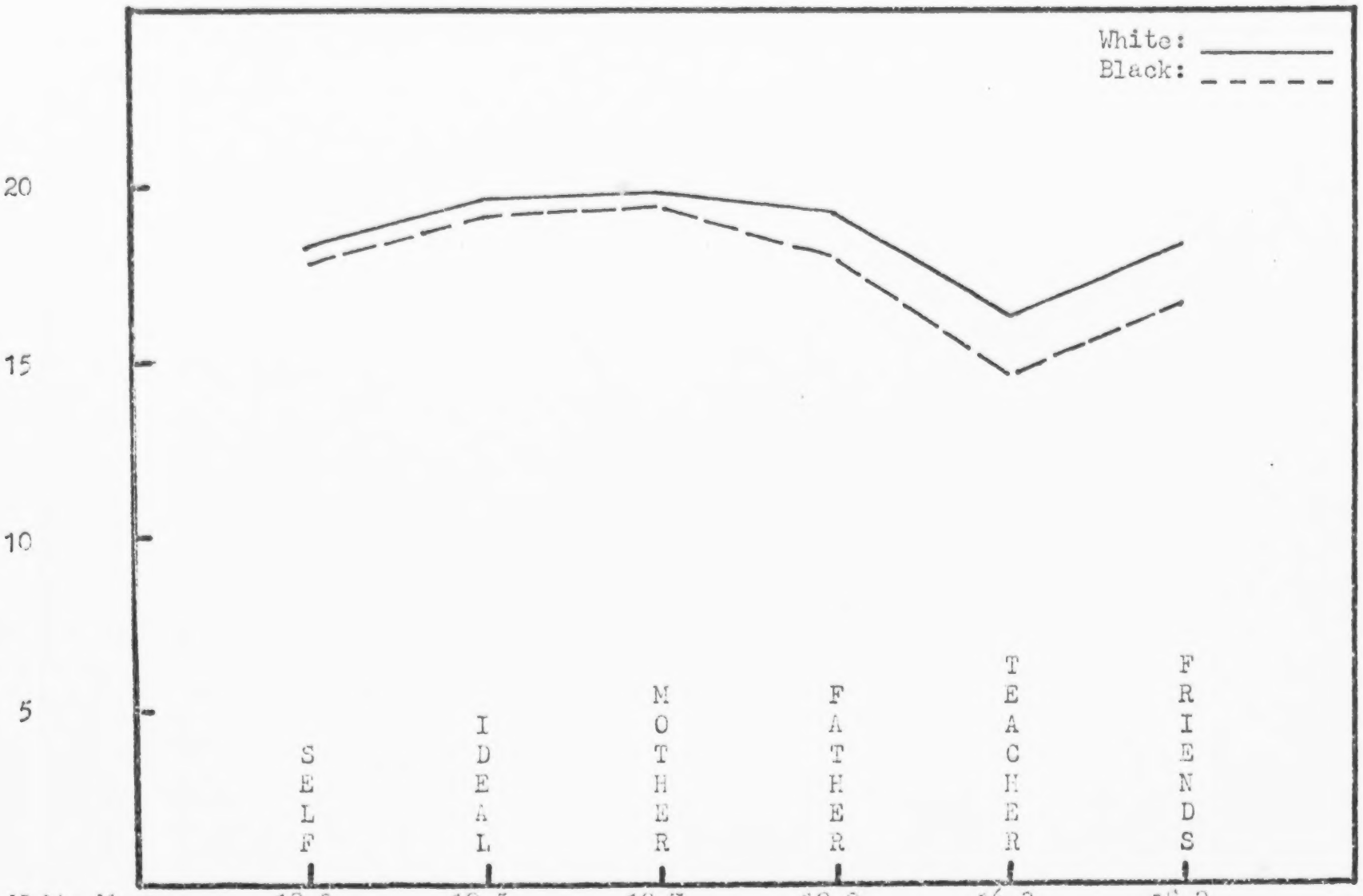
	ACH	DEF	ORD	EXH	AUT	AFF	INT	SUC	DOM	ABA	NUR	CHG	END	HET	AGG
Male Mean:	44.0	50.0	52.9	51.5	48.1	48.3	44.4	54.1	41.8	55.3	52.4	49.5	51.4	48.6	52.9
Female Mean:	44.1	45.8	51.5	49.6	51.9	49.0	46.8	51.3	42.3	53.3	54.0	50.6	48.3	52.0	54.8
z=		5.4	1.8	2.6	4.9		3.6	3.9		3.0	2.3	1.7	4.4	3.5	2.8
p=	NS	.01	NS	.01	.01	NS	.01	.01	NS	.01	.05	NS	.01	.01	.01

Figure 54. EPPS: Male - Female Comparison At Ninth Grade



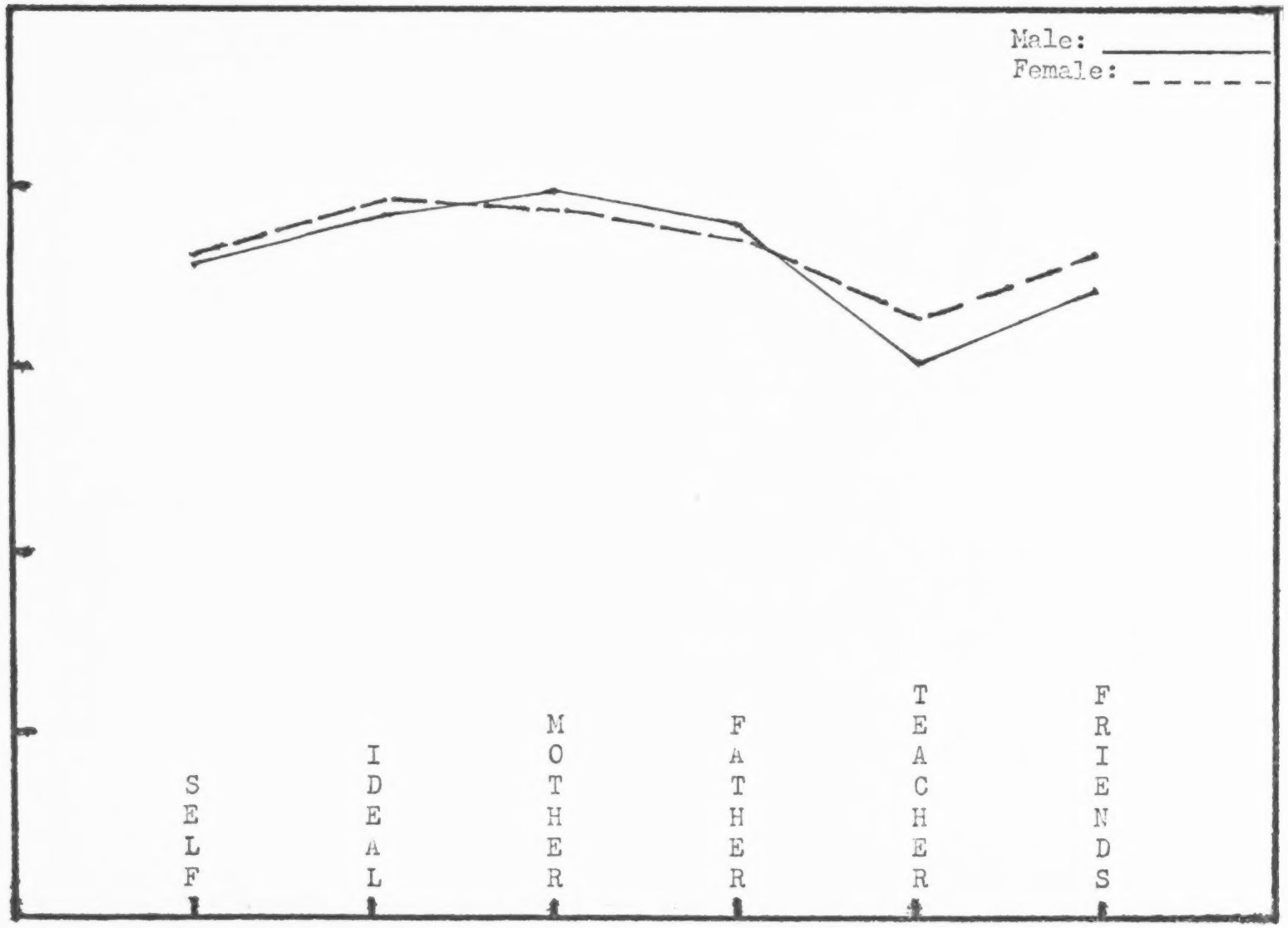
	ACH	DEF	ORD	EXH	AUT	AFF	INT	SUC	DOM	ABA	NUR	CHG	END	HET	AGG
Male Mean:	46.7	49.1	51.6	50.0	50.8	47.6	46.3	52.3	42.7	54.0	50.6	49.9	50.3	49.9	53.1
Female Mean:	46.2	43.1	49.1	50.3	53.3	48.5	46.9	52.3	41.6	53.6	53.6	52.2	46.0	54.4	54.8
z=		6.7	2.9		2.6				1.3		3.3	2.5	4.9	3.8	1.8
p=	NS	.01	.01	NS	.01	NS	NS	NS	NS	NS	.01	.05	.01	.01	NS

Figure 55. EPPS: Male - Female Comparison At Twelfth Grade



	SELF	IDEAL	MOTHER	FATHER	TEACHER	FRIENDS
White Mean:	18.2	19.5	19.7	19.2	16.3	18.2
Black Mean:	17.9	19.2	19.5	18.0	14.6	16.6
z=	1.4	1.6	1.5	5.6	6.0	8.3
p=	NS	NS	NS	.01	.01	.01

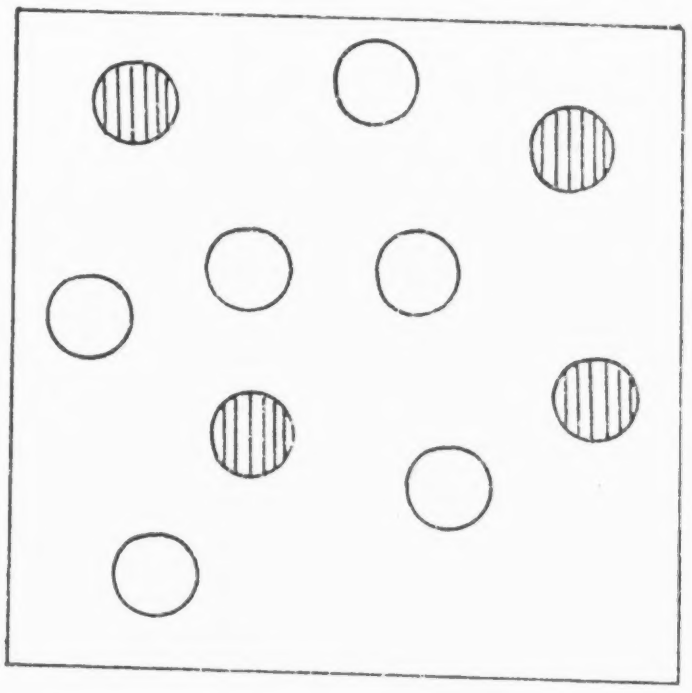
Figure 56. Semantic Differential Evaluative Scale
Black - White Comparison At Three Grade Levels Combined



	SELF	IDEAL	MOTHER	FATHER	TEACHER	FRIENDS
Male Mean:	18.0	19.2	19.8	19.0	15.3	17.4
Female Mean:	18.2	19.6	19.6	18.8	16.5	18.2
z=	1.4	2.0	1.0	1.5	4.8	4.9
p=	NS	.05	NS	NS	.01	.01

Figure 57. Semantic Differential Evaluative Scale
Male - Female Comparison At Three Grade Levels Combined

1. All of the circles within the square stand for other people. Choose any <u>one</u> of the three circles on the right to stand for yourself, and draw one like it anywhere in the square.



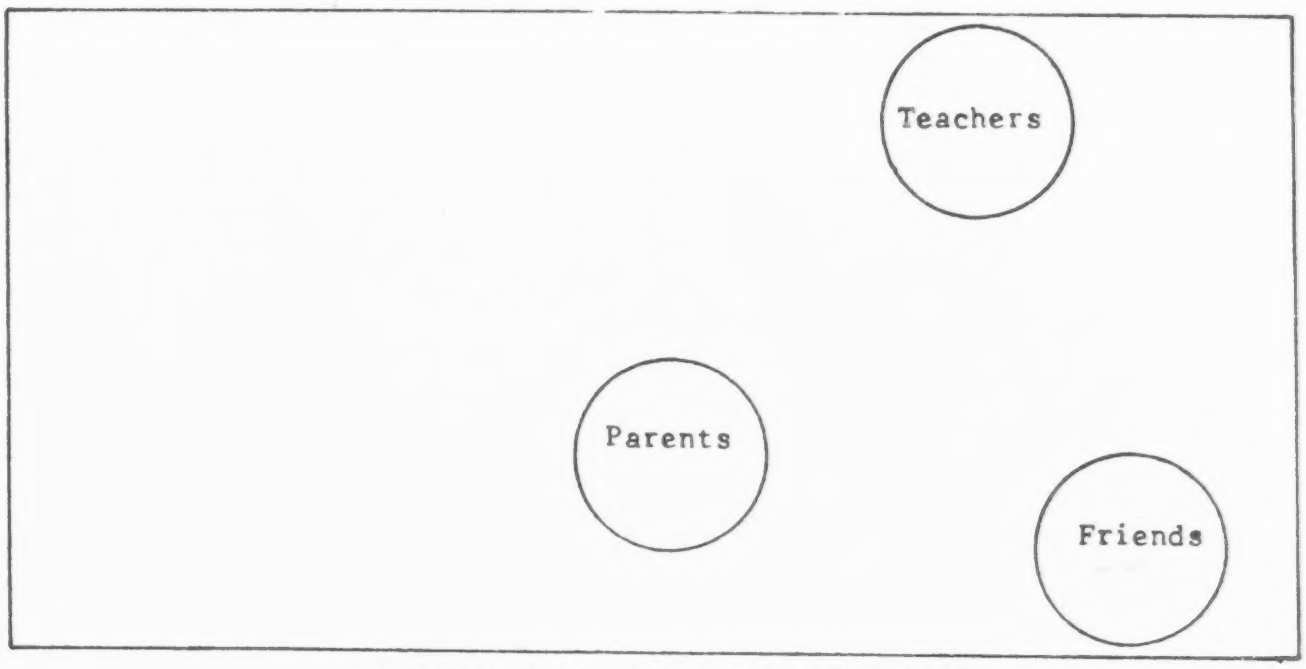
INDIVIDUATION SCALE

2. Choose one of the designs below to stand for yourself. Draw a circle around it.

COMPLEXITY SCALE

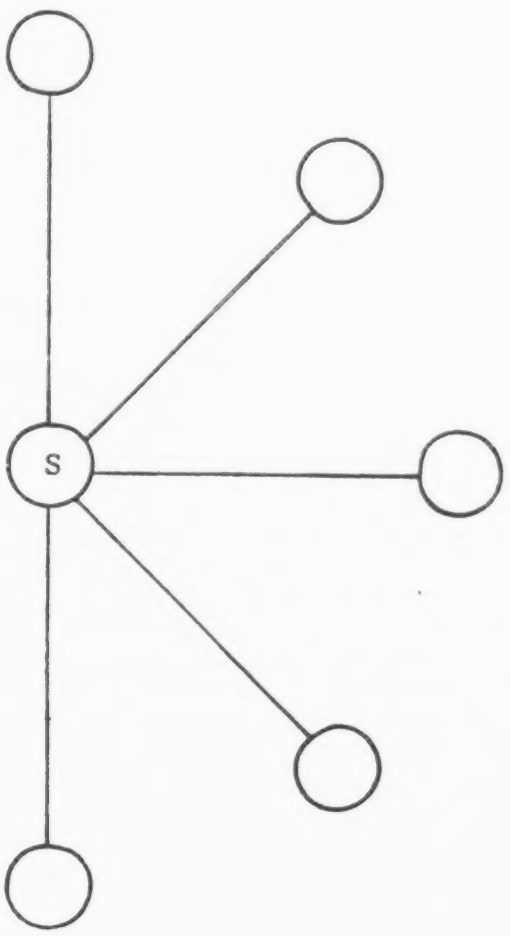
Figure 58. Facsimiles of Self-Social Symbols Tasks

3. The circles below stand for your Parents, Teachers, and Friends. Draw a circle to stand for yourself anywhere in the space below.



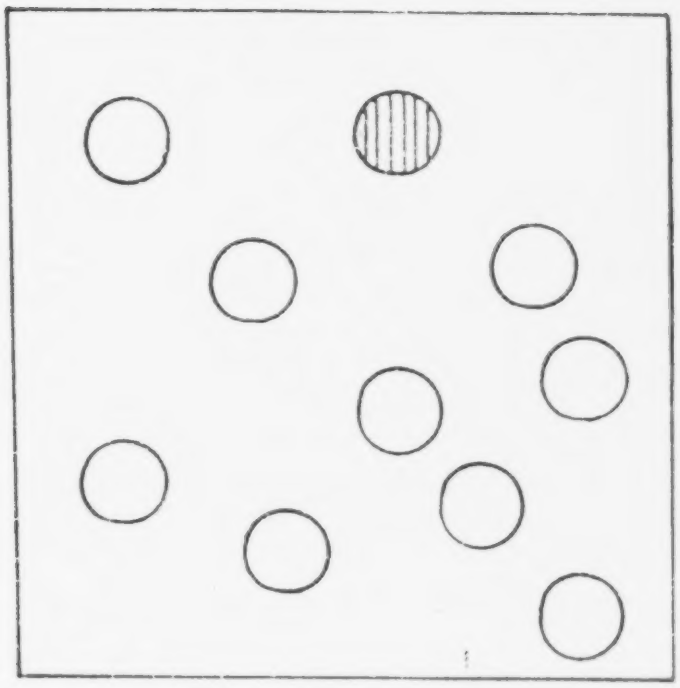
DEPENDENCY OR SOCIAL INTEREST SCALE

4. The circle below marked S stands for yourself. Choose one of the circles to stand for your father, and put an F in it.



POWER SCALE

5. All of the circles within the square stand for other people. Choose any <u>one</u> of the three circles on the right to stand for yourself, and draw one like it anywhere in the square.

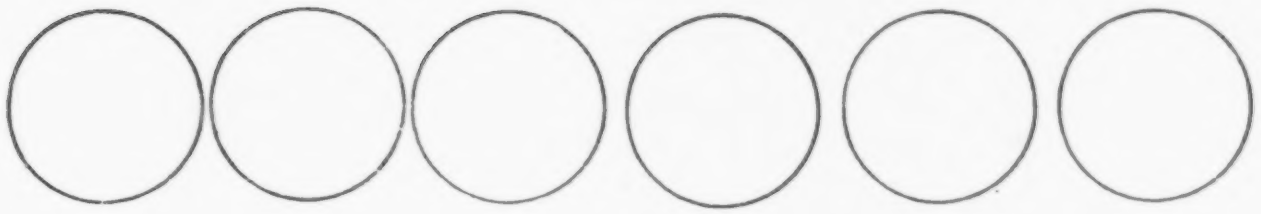


INDIVIDUATION SCALE

6. The circles below stand for people. Mark each circle with the letter standing for one of the people in the list. Do this in any way you like, but use each person only once and do not omit anyone.

D - Doctor	M - Mother
F - Father	S - Yourself
Fr- Friend	T - Teacher

HORIZONTAL ESTEEM SCALE

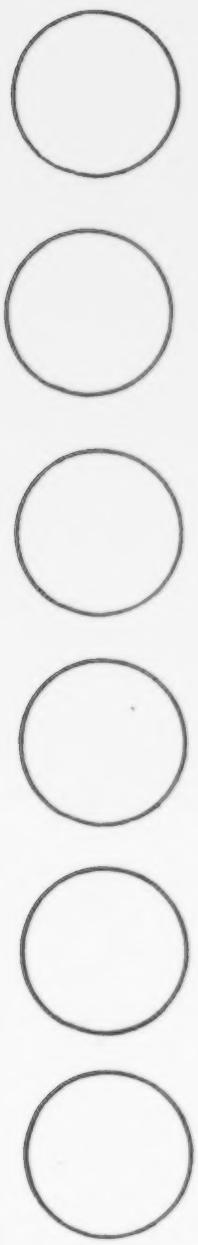


8A.

The circles below stand for people. Mark each circle with the letter standing for one of the people in the list. Do this in any way you like, but use each person only once and do not omit anyone.

F - someone who is flunking
H - the happiest person you know
K - someone you know who is kind
S - yourself
Su- someone you know who is successful
St- the strongest person you know

VERTICAL ESTEEM SCALE



9. In the large circle below, draw two circles--one to stand for yourself and a second to stand for a friend. Place an S in the circle for self and an F in the circle for your friend.

CENTRALITY SCALE

10. The M below stands for your mother. Choose one of the circles to stand for yourself, and place an S in it.

IDENTIFICATION WITH MOTHER SCALE

11. (D) (F) (Fr) (H) (M) (N) (S) (Su) (U)

These letters stand for the following people: (D) Doctor, (F) Father, (Fr) Friend, (H) someone you know who is happy, (M) Mother, (N) a neighbor, (S) yourself, (Su) someone you know who is successful, (U) someone with whom you are uncomfortable.

Your task is to arrange these people into as many or as few groups as you wish. In the space below, draw a circle around the letter to stand for each person, putting whichever ones you wish together. It does not matter how you arrange the people, but use each person only once and be sure to use all of them. If you think a person does not belong with any of the others, he may be placed by himself. When you have finished grouping the circles, draw a large circle around each of the groups in order to keep them separated.

GROUPING SCALE

TABLE I-A

MEANS AND STANDARD DEVIATIONS OF TOTAL SCORES ON SELF-SOCIAL SYMBOLS TASKS

		K						3					
		Male			Female			Male					
SCALE		M	S.D.	N	M	S.D.	N	M	S.D.	N	M	S.D.	N
HE	w	22.8	6.1	198	23.2	5.9	189	20.5	5.8	188	23.1	5.5	165
	b	20.6	7.3	69	21.9	6.8	69	21.3	5.8	68	21.3	6.1	54
VE	w	25.4	6.6	198	25.4	6.3	189	20.7	6.8	188	22.0	6.2	165
	b	25.5	5.9	69	25.2	6.3	69	21.4	6.3	68	21.3	6.6	54
IM	w	5.3	2.9	198	4.7	3.5	189	4.5	3.8	188	3.7	3.2	165
	b	5.9	3.6	69	5.7	3.5	69	4.5	3.4	68	4.2	2.9	54
IFa	w	5.7	4.0	198	5.3	3.7	189	4.3	3.5	188	5.0	4.1	165
	b	6.7	3.7	69	6.1	2.6	69	5.1	3.9	68	6.3	4.8	54
IT	w	7.9	4.0	198	6.7	3.8	189	8.4	4.3	188	6.0	4.0	165
	b	7.7	3.2	69	6.9	3.4	69	7.8	4.3	68	7.1	4.2	54
IFr	w	6.4	5.0	198	6.9	5.5	189	5.4	4.6	188	5.1	4.6	165
	b	6.6	5.2	69	5.6	4.3	69	5.6	5.1	68	6.3	5.1	54
IND	w	5.4	1.6	198	5.4	1.5	189	5.2	1.9	188	5.2	1.9	165
	b	4.7	1.4	69	5.1	1.7	69	5.7	1.9	68	5.6	2.0	54
POW	w	14.9	4.6	198	14.8	4.5	189	17.6	3.3	188	16.8	3.9	165
	b	15.5	5.1	69	15.0	5.6	69	17.5	3.7	68	16.9	3.2	54
DE	w	1.8	1.8	198	2.0	1.7	189	3.5	1.9	188	3.3	2.0	165
	b	1.1	1.3	69	1.2	1.6	69	2.9	2.0	68	2.5	1.9	54
REAL	w	5.8	3.0	198	6.0	2.5	189	5.8	3.1	188	5.7	2.7	165
	b	3.2	3.0	69	3.7	3.1	69	6.1	2.8	68	5.1	2.8	54

TABLE II-A

MEANS AND STANDARD DEVIATIONS OF TOTAL

6

SCALE		Male M	Male S.D.	Male N	Female M	Female S.D.	Female N
HE	w	22.8	7.5	241	24.0	6.9	188
	b	21.3	7.3	88	24.2	7.0	89
VE	w	23.7	7.0	241	24.7	7.1	188
	b	22.2	7.2	88	25.0	7.0	89
IM	w	3.1	2.4	241	3.2	2.7	188
	b	3.5	2.9	88	3.2	2.3	89
IFa	w	3.3	2.7	241	3.5	3.0	188
	b	4.1	3.7	88	4.2	3.3	89
IT	w	8.3	5.1	241	7.9	5.0	188
	b	8.9	5.1	88	9.5	4.9	89
IFr	w	4.1	3.1	241	4.1	3.1	188
	b	4.6	3.4	88	6.0	4.0	89
IND	w	6.9	3.0	241	7.0	2.8	188
	b	6.7	2.4	88	7.1	2.1	89
POW	w	16.7	3.4	241	17.1	2.8	188
	b	17.7	3.7	88	17.1	3.4	89
DE	w	4.5	2.0	241	4.4	2.0	188
	b	3.3	2.2	88	3.5	2.1	89
CE	w	2.2	1.6	241	2.7	1.7	188
	b	2.0	1.6	88	2.4	1.7	89
COM	w	23.4	3.7	241	22.3	3.8	188
	b	23.0	3.2	88	22.5	3.1	89
GR I	w	18.3	7.7	241	16.9	6.4	188
	b	17.8	8.3	88	17.7	7.6	89
GR II	w	3.2	1.5	241	3.1	1.5	188
	b	3.1	1.6	88	3.3	1.3	89

SCORES ON SELF-SOCIAL SYMBOLS TASKS

9						12					
Male			Female			Male			Female		
M	S.D.	N	M	S.D.	N	M	S.D.	N	M	S.D.	N
24.4	7.1	213	22.6	7.2	230	24.3	7.8	136	26.7	6.4	152
24.5	7.0	67	25.1	7.7	75	25.9	7.0	49	29.1	6.6	39
25.2	7.1	213	22.8	7.2	230	25.0	7.6	136	27.0	6.5	152
25.3	7.4	67	25.3	7.4	75	26.2	6.8	49	28.9	6.3	39
3.8	3.0	213	4.0	3.3	230	4.5	3.6	136	3.6	3.1	152
4.2	3.9	67	4.4	3.7	75	3.4	2.7	49	4.6	4.4	39
4.1	3.6	213	4.9	4.1	230	5.0	4.3	136	4.2	3.6	152
4.8	4.0	67	6.2	5.1	75	5.8	4.7	49	5.0	4.3	39
8.5	4.4	213	7.4	3.8	230	8.2	4.7	136	6.6	3.6	152
9.9	5.1	67	8.6	4.8	75	8.4	4.5	49	7.0	3.6	39
4.2	3.0	213	3.2	1.8	230	4.0	3.0	136	2.9	1.7	152
5.2	3.8	67	4.3	3.4	75	4.7	3.4	49	3.9	3.1	39
6.8	2.9	213	7.0	3.0	230	6.7	3.2	136	6.9	2.9	152
6.8	2.6	67	7.7	2.3	75	7.4	2.4	49	7.8	2.5	39
16.1	3.6	213	16.5	2.9	230	15.8	4.0	136	16.5	3.3	152
17.0	3.4	67	16.9	3.7	75	17.1	3.2	49	15.8	3.9	39
4.7	2.0	213	4.7	1.9	230	4.8	2.1	136	5.1	1.6	152
4.2	2.1	67	4.1	2.2	75	4.5	2.1	49	4.0	2.3	39
2.5	1.9	213	2.1	1.7	230	2.4	1.9	136	2.1	1.7	152
2.1	1.7	67	2.7	1.8	75	1.3	1.4	49	1.4	1.4	39
23.3	3.7	213	23.1	3.4	230	22.5	4.1	136	23.4	3.2	152
23.0	3.8	67	23.1	3.4	75	22.8	3.2	49	23.2	3.1	39
16.4	6.3	213	16.9	5.1	230	18.4	7.3	136	16.1	5.6	152
16.6	6.8	67	15.4	6.7	75	14.5	6.2	49	16.0	5.0	39
3.1	1.5	213	2.6	1.7	230	2.6	1.7	136	2.5	1.8	152
3.1	1.5	67	2.2	1.6	75	2.3	1.6	49	2.5	1.7	39

TABLE III-A MEANS AND STANDARD DEVIATIONS OF 6

			Male			Female		
			M	S.D.	N	M	S.D.	N
EVAL.	SELF	w	18.4	3.1	237	18.6	2.9	192
		b	17.5	3.0	85	17.8	3.4	89
	IDEAL	w	19.6	2.4	250	20.0	2.0	200
		b	18.5	2.9	79	19.7	1.8	91
	MOTHER	w	20.2	1.8	237	19.9	2.4	192
		b	19.4	2.7	85	19.7	2.0	89
	FATHER	w	20.0	2.1	237	19.5	3.3	192
		b	19.0	2.8	85	19.1	2.8	89
	TEACHER	w	16.0	5.1	237	17.4	3.6	192
		b	13.9	5.8	85	14.5	5.3	89
	FRIENDS	w	17.8	3.6	237	18.6	3.0	192
		b	17.0	3.8	85	16.6	4.0	89
POT.	SELF	w	14.8	3.6	237	11.1	4.3	192
		b	14.0	3.9	85	11.2	3.0	89
	IDEAL	w	16.7	3.3	250	12.7	2.9	200
		b	15.7	3.2	79	12.0	3.6	91
	MOTHER	w	12.5	3.4	237	11.3	3.1	192
		b	12.0	3.5	85	11.1	2.8	89
	FATHER	w	17.0	3.1	237	15.2	3.0	192
		b	16.4	3.7	85	14.3	3.6	89
	TEACHER	w	12.6	3.8	237	13.2	2.9	192
		b	12.2	3.9	85	12.9	3.7	89
	FRIENDS	w	14.1	3.1	237	12.6	1.3	192
		b	13.3	3.2	85	11.9	2.8	89
ACT.	SELF	w	16.6	2.6	237	16.0	2.8	192
		b	16.7	3.2	85	16.6	3.3	89
	IDEAL	w	17.8	2.4	250	17.4	2.4	200
		b	17.9	2.7	79	17.3	3.0	91
	MOTHER	w	15.9	3.1	237	16.2	3.2	192
		b	14.7	3.8	85	15.3	3.6	89
	FATHER	w	17.0	2.8	237	16.4	3.3	192
		b	16.7	3.2	85	16.2	2.9	89
	TEACHER	w	13.7	4.1	237	14.8	3.5	192
		b	12.8	4.5	85	13.2	3.9	89
	FRIENDS	w	16.3	2.9	237	16.1	2.8	192
		b	15.6	3.5	85	15.9	2.9	89
B-W	SELF	w	6.9	.6	237	6.9	.3	192
		b	1.3	1.0	85	1.4	.9	89
	IDEAL	w	6.9	.4	250	6.9	.3	200
		b	1.5	1.2	79	1.5	.9	91
	MOTHER	w	6.9	.5	237	6.9	.4	192
		b	1.4	1.3	85	1.7	1.4	89
	FATHER	w	6.9	.4	237	6.8	.9	192
		b	1.4	1.0	85	1.4	.9	89
	TEACHER	w	4.8	1.7	237	6.3	1.5	192
		b	6.0	1.8	85	5.9	2.1	89
	FRIENDS	w	5.6	1.4	237	5.6	1.5	192
		b	2.2	1.5	85	2.4	1.7	89

TOTAL SCORES ON SEMANTIC DIFFERENTIAL SCALES

9						12					
Male			Female			Male			Female		
M	S.D.	N	M	S.D.	N	M	S.D.	N	M	S.D.	N
17.7	2.9	213	17.9	2.5	229	17.9	2.8	156	18.5	2.5	175
17.4	3.0	66	18.0	2.6	78	19.1	1.9	53	18.6	2.4	43
18.7	2.6	210	19.4	2.2	235	19.4	3.3	155	19.8	2.0	177
18.6	2.4	67	19.1	2.4	74	19.7	1.8	56	19.6	3.4	42
19.8	2.1	213	19.6	2.3	229	19.3	2.8	156	19.5	2.6	175
19.4	2.5	66	19.4	2.1	78	20.0	2.2	53	19.4	2.5	43
18.9	3.3	2.3	19.1	3.1	229	18.9	3.2	156	18.8	3.6	175
18.4	3.4	66	16.6	4.7	78	16.6	5.3	53	17.2	4.8	43
15.4	4.4	2.3	16.6	3.9	229	15.4	4.6	156	17.2	3.2	175
13.4	5.2	66	15.2	4.9	78	15.6	3.8	53	16.1	3.6	43
17.4	2.9	2.3	18.6	2.4	229	17.9	3.0	156	19.1	2.2	175
16.1	3.0	66	17.0	4.9	78	16.5	3.0	53	16.4	3.2	43
15.1	3.2	213	11.8	2.7	229	15.8	3.1	156	11.8	2.9	175
15.3	3.1	66	11.0	3.2	78	15.4	3.4	53	11.1	3.2	43
17.2	2.8	210	11.9	2.9	235	17.7	2.6	155	12.3	2.7	177
15.9	3.2	67	12.2	2.8	74	17.4	2.5	56	12.1	2.0	42
12.0	3.5	213	11.5	3.1	229	11.7	3.2	156	12.3	3.0	175
11.9	3.3	66	11.1	2.7	78	12.9	3.3	53	12.3	3.4	43
16.9	3.2	2.3	15.6	3.0	229	16.3	3.3	156	15.2	3.4	175
16.3	3.0	66	14.0	3.3	78	15.2	4.6	53	14.9	3.5	43
13.1	3.4	213	13.1	2.5	229	12.7	3.6	156	13.2	2.2	175
11.8	3.7	66	11.9	2.7	78	12.7	3.0	53	13.0	2.9	43
14.7	2.8	213	13.2	2.1	229	15.2	2.7	156	13.9	2.3	175
13.2	2.5	66	12.6	2.9	78	14.5	3.0	53	13.0	2.2	43
16.1	2.9	213	15.8	2.6	229	16.5	2.6	156	16.2	2.5	175
16.1	2.7	66	15.6	2.4	78	15.9	2.5	53	15.7	2.6	43
17.7	2.4	210	16.9	2.5	235	17.9	2.1	155	17.3	2.2	177
17.3	2.4	67	16.0	2.6	74	17.1	2.6	56	15.9	2.4	42
15.3	3.0	2.3	15.7	3.1	229	14.8	3.0	156	15.6	3.3	175
14.7	3.1	66	14.2	3.2	78	14.9	3.7	53	14.5	3.1	43
15.8	3.4	213	15.8	3.7	229	15.3	3.5	156	15.3	3.7	175
15.7	3.0	66	14.2	3.9	78	13.9	3.5	53	14.9	3.5	43
14.0	3.6	213	14.5	3.2	229	14.0	3.6	156	14.5	2.6	175
12.1	4.2	66	13.7	3.4	78	14.1	3.3	53	13.2	2.6	43
15.9	2.6	213	16.3	2.4	229	16.3	2.4	156	16.3	2.4	175
15.3	2.7	66	15.2	2.5	78	15.3	3.3	53	15.2	2.5	43
6.8	.6	213	6.8	.6	229	6.8	.7	156	6.8	.6	175
1.9	2.1	66	1.6	1.1	78	1.4	1.0	53	1.4	1.1	43
6.7	.7	210	6.7	.9	235	6.7	.9	155	6.7	1.0	177
1.9	1.6	67	1.8	1.2	74	1.5	1.2	56	1.2	.6	42
6.8	.6	213	6.9	.5	229	6.7	.9	156	6.9	.4	175
2.2	1.8	66	1.7	1.3	78	1.4	1.1	53	1.3	1.0	43
6.7	.9	213	6.8	.7	229	6.6	1.0	156	6.9	.5	175
2.1	1.7	66	1.7	1. 2	78	1.4	1.1	53	1.4	1.1	43
5.7	1.5	213	5.6	1.6	229	5.7	1.5	156	5.5	1.5	175
4.7	2.2	66	5.0	2.1	78	4.8	1.9	53	5.5	1.8	43
5.6	1.3	213	5.3	1. 4	229	5.7	1.3	156	5.7	1.6	175
2.8	1.4	66	2.7	1.4	78	2.5	1.3	53	2.6	1.8	43

TABLE IV-A

MEANS AND STANDARD DEVIATIONS ON

6

SCALE		Male M	Male S.D.	Male N	Female M	Female S.D.	Female N
NCKD	w	67.9	34.5	255	64.4	34.1	208
	b	73.1	43.1	77	60.6	28.3	86
DF	w	10.7	5.5	255	10.9	6.6	208
	b	9.8	6.0	77	7.6	4.9	86
FAV	w	29.5	13.4	255	31.0	14.6	208
	b	27.9	14.3	77	26.7	14.3	86
UFAV	w	7.4	8.4	255	5.4	6.9	208
	b	10.6	10.7	77	7.7	7.6	86
SCFD	w	3.1	3.6	255	1.8	3.4	208
	b	3.5	3.7	77	.6	2.6	86
SCN	w	1.0	4.0	255	2.4	3.9	208
	b	.8	3.3	77	1.0	3.5	86
LAB	w	4.3	3.0	255	4.4	2.9	208
	b	4.2	3.1	77	3.2	2.3	86
PADJ	w	6.4	4.0	255	7.1	4.2	208
	b	5.7	3.7	77	5.1	3.2	86

EIGHT ADJECTIVE CHECK LIST SCALES

9						12					
Male			Female			Male			Female		
M	S.D.	N	M	S.D.	N	M	S.D.	N	M	S.D.	N
73.3	32.8	221	77.3	30.9	241	93.0	35.4	158	91.3	34.0	178
62.4	32.9	65	66.4	27.3	76	85.8	32.8	54	92.1	29.5	43
12.3	5.7	221	13.7	6.4	241	15.0	6.1	158	15.1	6.9	178
10.6	5.6	65	9.9	5.6	76	14.7	5.5	54	17.3	5.8	43
33.5	14.3	221	36.1	13.4	241	40.8	15.0	158	40.2	14.4	178
30.2	13.7	65	29.5	11.5	76	40.2	13.3	54	45.0	13.1	43
7.1	8.4	221	6.3	6.6	241	9.4	8.4	158	9.8	8.7	178
5.1	7.9	65	7.1	6.7	76	7.2	7.8	54	7.1	6.9	43
5.1	4.5	221	3.7	3.8	241	7.0	4.9	158	4.8	4.5	178
3.4	3.3	65	2.0	3.2	76	5.2	4.0	54	5.4	3.7	43
1.5	4.7	221	1.8	4.6	241	2.3	5.0	158	2.2	5.4	178
2.3	3.5	65	1.6	3.5	76	5.3	3.8	54	4.2	5.0	43
5.4	3.2	221	5.9	3.5	241	6.4	3.7	158	7.1	3.6	178
4.7	3.2	65	4.1	2.5	76	5.5	3.5	54	6.5	3.1	43
6.9	4.4	221	7.9	4.5	241	7.7	4.6	158	8.2	4.6	178
6.5	3.8	65	6.1	3.6	76	8.7	4.0	54	9.9	4.3	43

TABLE V-A MEANS AND STANDARD DEVIATIONS

6

SCALE		Male M	Male S.D.	Male N	Female M	Female S.D.	Female N
ACH	w	13.1	2.9	241	11.7	3.1	190
	b	13.5	2.6	65	12.5	3.2	78
DEF	w	12.4	3.2	241	11.8	3.4	190
	b	13.3	3.1	65	12.9	2.8	78
ABA	w	14.5	3.6	241	16.2	3.6	190
	b	13.9	3.1	65	14.9	3.6	78
SUC	w	13.1	3.2	241	13.0	4.0	190
	b	13.1	3.3	65	13.0	3.6	78
DOM	w	13.5	3.0	241	12.4	3.5	190
	b	13.8	2.6	65	12.7	3.1	78
AFF	w	15.9	3.4	241	18.0	3.8	190
	b	15.3	3.1	65	16.7	3.5	78
EXH	w	14.9	3.0	241	14.3	3.3	190
	b	14.1	2.4	65	13.8	2.8	78
AUT	w	12.6	3.1	241	11.8	3.5	190
	b	13.0	3.1	65	12.6	2.8	78
INT	w	12.8	3.0	241	13.7	3.2	190
	b	13.2	2.6	65	13.2	3.3	78
NUR	w	15.7	3.7	241	17.5	4.1	190
	b	15.4	2.9	65	16.3	3.2	78
CHG	w	14.7	3.3	241	16.4	3.9	190
	b	14.1	2.7	65	15.4	3.4	78
ORD	w	13.0	3.3	241	12.7	3.6	190
	b	13.9	2.7	65	13.9	3.2	78
END	w	14.4	3.2	241	14.2	4.0	190
	b	14.0	2.7	65	14.0	3.0	78
HET	w	14.5	6.3	241	11.3	6.8	190
	b	14.7	4.4	65	12.6	6.1	78
AGG	w	13.3	3.4	241	13.0	3.5	190
	b	12.2	3.1	65	13.2	3.3	78
CON	w	8.7	2.3	241	9.7	2.4	190
	b	8.0	1.6	65	9.0	2.5	78

OF RAW SCORES OF EDWARDS PERSONAL PREFERENCE SCALE

9						12					
Male			Female			Male			Female		
M	S.D.	N	M	S.D.	N	M	S.D.	N	M	S.D.	N
13.2	3.8	210	10.2	3.8	236	14.2	4.1	153	11.3	4.1	164
13.1	3.5	64	12.0	2.6	72	14.6	4.0	45	12.2	3.9	41
11.0	3.4	210	10.5	3.3	236	10.8	3.4	153	9.9	3.2	164
11.8	3.7	64	11.8	3.3	72	11.3	2.9	45	9.8	3.5	41
14.9	4.2	210	16.8	4.2	236	14.0	4.5	153	17.0	4.6	164
14.3	3.4	64	16.1	3.2	72	14.6	3.8	45	16.0	3.9	41
12.5	4.2	210	13.2	4.0	236	11.8	4.3	153	14.0	4.2	164
13.3	3.2	64	12.8	3.8	72	11.9	3.9	45	11.6	3.7	41
13.5	3.6	210	10.4	4.0	236	13.7	4.2	153	10.1	4.3	164
13.2	3.4	64	11.6	3.4	72	14.4	4.0	45	11.2	4.4	41
14.2	3.8	210	17.8	3.7	236	14.0	3.6	153	17.1	3.6	164
14.5	2.8	64	14.4	3.8	72	13.7	4.0	45	15.5	4.7	41
15.2	3.1	210	14.5	3.4	236	14.4	3.2	153	14.9	3.4	164
14.0	3.0	64	13.1	3.2	72	14.1	2.8	45	12.6	3.7	41
13.8	4.1	210	13.0	4.2	236	15.2	4.5	153	13.9	4.1	164
12.7	3.6	64	13.3	3.9	72	13.2	3.5	45	12.7	3.4	41
13.1	4.0	210	15.9	3.9	236	13.9	4.1	153	15.8	4.5	164
13.8	3.5	64	15.6	3.7	72	15.2	3.9	45	16.2	3.7	41
15.1	4.1	210	18.9	4.2	236	14.1	4.8	153	18.3	3.7	164
15.5	3.2	64	15.8	3.4	72	15.0	4.0	45	16.9	4.1	41
15.5	3.8	210	17.6	3.9	236	15.4	4.4	153	18.3	4.1	164
14.6	3.2	64	17.2	3.8	72	16.0	3.4	45	17.9	4.5	41
11.3	4.4	210	10.4	3.9	236	10.8	4.0	153	9.5	3.7	164
12.3	3.7	64	12.6	3.7	72	11.2	3.4	45	11.1	4.2	41
13.6	4.2	210	11.5	4.8	236	12.9	4.9	153	10.2	4.5	164
12.9	3.8	64	12.6	3.2	72	12.5	4.5	45	11.9	4.0	41
17.1	6.7	210	15.7	6.7	236	17.5	6.4	153	16.4	6.2	164
16.2	4.2	64	14.6	5.5	72	17.9	6.3	45	17.9	6.7	41
14.4	3.4	210	12.9	4.3	236	14.4	4.4	153	12.7	4.3	164
13.3	3.1	64	12.5	4.4	72	13.7	3.3	45	13.2	4.7	41
9.8	2.5	210	11.1	2.2	236	10.1	2.7	153	11.7	2.0	164
8.6	2.5	64	9.7	2.5	72	10.2	2.5	45	10.4	2.7	41